4/1/88 B 6200-2

World Financial Markets

JPMorgan

1988 issue 1
March 18

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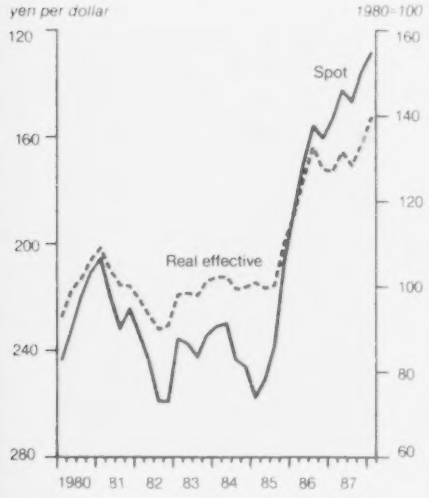
Chart 1

Yen exchange rates



Is Japan adjusting enough?

The sharp rise of the yen during 1985-86 triggered profound pessimism in Japan about industry's ability to cope. Deeply concerned, the Japanese government prevailed on the U.S. government to seek greater exchange rate stability. But though it gave a little ground last spring, the Japanese government at heart was unwilling to give up fiscal restraint. Markets, seeing the conflict between domestic policy and external adjustment, moved the dollar lower (see Chart 1).

Many Japanese companies saw disaster ahead. But their fears proved exaggerated; disaster did not strike. Tapping broad-based strength in consumption, housing, and investment, industry was able to raise output 4% in calendar 1987. Domestic demand growth ran 5% of GNP, underwriting a profits resurgence plus 4.2% real GNP growth despite a negative contribution from net exports (see Chart 2). Optimism returned to the Tokyo stock market, but is this well-founded?

Japan's economic growth should continue strong over the first half of 1988. But the government plans to tighten fiscal policy. If monetary policy also turns less accommodative, domestic demand could be squeezed and overall growth could be dragged down well below Japan's potential. That would not be conducive to external adjustment. Net export adjustment already has slowed in volume terms. Although Japan's trade surplus has slipped, the combined surpluses of Japan and the principal Asian NICs — where Japanese business and technology investment is large — show little reduction.

The surpluses stir trade conflicts and increasingly pose investment issues too, especially for direct investment. Japan needs to reconsider its fiscal goals, as do the United States and Europe. Until fiscal policies become more consistent globally, it would be a mistake to hold the key exchange rates within some new straitjacket. Japan will have to come to terms with the need for renewed appreciation of the yen, an appreciation that will have to be all the greater if it insists on tightening domestic policy.

Chart 2

Real GNP growth

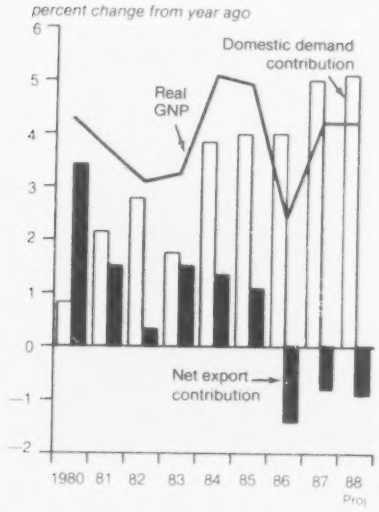


Table 1

Industrial performance

percent change at seasonally adjusted annual rates

	1980-1985	1985Q4-1987Q1	1987Q2-1987Q4
Industrial production	4.1	—0.1	10.6
Capital goods	7.1	—0.0	16.0
Construction goods	2.6	1.9	6.5
Consumer durables	8.9	—3.1	2.2
Consumer nondurables	2.8	2.7	2.7
Shipments	3.1	0.8	8.6
Capital goods	6.2	2.2	14.0
Manufacturing inventories	2.5	—2.8	—6.3

The challenge to industry

The dollar's slide after early 1985 threatened Japan's manufacturing industry as no other sector of the economy. During the first half of the 1980s, exports had accounted for half the growth in Japan's industrial shipments, and over 60% counting in domestic investment to service export markets. But from the second half of 1985 through early 1987, as exports faltered, industry's overall production and shipments stagnated (see Table 1).

The scale of the competitive challenge to Japan is exemplified by the near-40% drop in U.S. manufacturers' unit labor costs in yen terms since the dollar's peak (those costs are down some 3% in dollar terms). At the same time, the NICs of East and Southeast Asia offer much lower wage rates than Japan. Fast-rising productivity in a number of industries in these NICs has narrowed or erased the unit cost advantage of Japan's high level of labor productivity; moreover, as the yen has risen, most of the NICs, with the important exceptions of Taiwan and — more tentatively — Korea, virtually pegged their currencies to the dollar.

This backdrop has given Japanese firms a powerful incentive to shift production abroad, use more foreign parts, import assembled goods, boost domestic productivity, and contain costs generally. Japanese industry, particularly its manufacturers, now envisages that overseas facilities in North America, Europe, and Asia will provide a growing proportion of their worldwide production. Even so, expectations for increasing imports into Japan are not particularly strong; seemingly, overseas facilities are intended primarily to service overseas markets.

On cost containment, it is often noted that the strong yen has benefited Japanese firms' material costs. The Ministry of International Trade and Industry has estimated that in the two years through the third quarter of 1987, lower materials prices reduced unit total costs of Japanese exports by 10% in yen terms. Foreigners, however, also enjoyed lower materials prices, so it is doubtful that Japanese firms recovered competitiveness thereby. By boosting productivity 8.6% between 1985 and 1987, Japanese manufacturers cut unit labor costs 3.6% (see Chart 3) and subtracted about 2% from their unit total costs in yen terms. But the reductions enjoyed by their foreign rivals were much greater — on the order of 25% in yen terms in the case of U.S. manufacturers. Thus, despite impressive efforts in cost containment, Japanese industry has not been able to offset the dollar's slide fully.

Japanese firms therefore have had to accept greatly reduced profits on their export sales. But their recent domestic experience has compensated. Manufacturers have recouped most of their 1986 profit declines and could report an average 40% increase for FY1987; domestically oriented industries using foreign inputs, such as food and chemicals, are doing especially well. The profit recovery has been crucially dependent on the strengthening of domestic demand since last spring. This permitted some firming of domestic sales prices and substantially higher sales volume. Machinery sectors, such as automobiles and electronics, were conspicuous beneficiaries, attracting domestic consumer interest even as exports flagged.

Chart 3

Unit labor costs and productivity in manufacturing

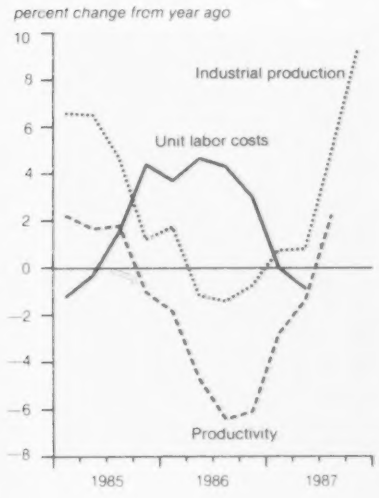
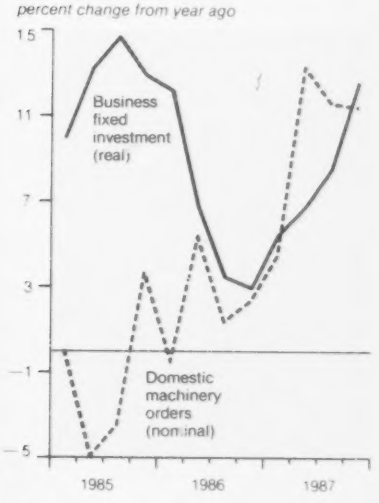


Chart 4

Business investment



By contrast, shipbuilding, aluminum smelting, and oil refining remained weighed down by structural difficulties. By the fourth quarter of 1987 most manufacturing sectors had joined the recovery: for example, chemicals and paper, thanks to domestic demand; and steel and metals, thanks to public works spending. Overall industrial production was up 9.6% from a year earlier and machinery orders up 12.8%.

Investment has turned upward accordingly. Following stagnation through most of 1986, real business fixed investment has grown at annual rates of 7%-10% (see Chart 4). For most of 1987, construction firms and other nonmanufacturers led the advance. But construction likely will slow in 1988; retail investment may only match last year's growth; and utilities, having been forced to pass on to industry and consumers some of the benefits of weak oil prices and a strong yen, are likely to cut investment.

Manufacturers are set to take up the slack. In the fourth quarter of 1987, capital goods shipments were up 10.7% year-on-year. True, steel and shipbuilding plan to squeeze investment. But such industries as paper, fabricated metals, and chemicals have begun to face capacity constraints and plan sizable expansion. Machinery industries, though not yet facing capacity constraints, are investing to improve productivity.

In sum, Japanese industry is faring remarkably well despite the yen's escalation. The much-publicized cost cutting at home and shifting of production overseas have helped, but more important has been the past year's domestic sales strength. The investment accelerator now is coming into play. Business fixed investment looks set to rise 8.6% this year, following 1987's 8.3% estimated gain. In the medium term, however, the investment outlook will be dominated by demand trends, both external and domestic.

Domestic demand

Expert opinion, both Japanese and foreign, has repeatedly urged that Japan face up to difficult structural changes and rebase its growth on domestic demand. In its 1986 and 1987 reports, the quasi-official Maekawa commission endorsed that view. On the domestic demand aspect, success depends ultimately on healthy growth in real private consumption, housing investment, and public works. These sectors were indeed healthy in 1987, especially in the second half. Of the 5.1% estimated growth in domestic demand for the calendar year, private consumption provided over two-fifths (rising 3.9%), housing investment a further fifth (jumping 20.6%), and public works just over one-tenth (up 8.4%).

Earlier in the decade, during 1980-84, Japan's domestic demand growth averaged only 2.3% annually. Real private consumption grew less than 3%. At the same time, despite long-standing dissatisfaction with housing conditions, housing investment was depressed, in part through cuts in government programs. Public investment suffered its share of fiscal austerity too. Consumption and housing further were hit by growing uncertainty about employment and real incomes, an uncertainty that prompted workers' households to boost their saving rate more than two percentage points between 1982 and 1987.

Chart 5

Prices and earnings

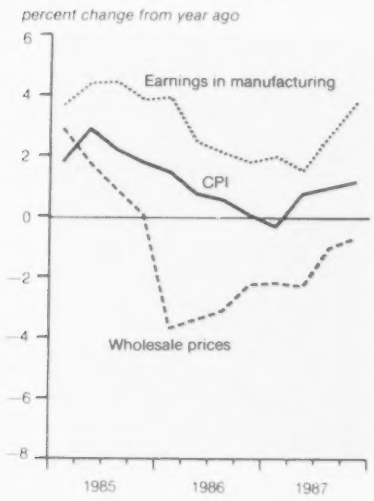
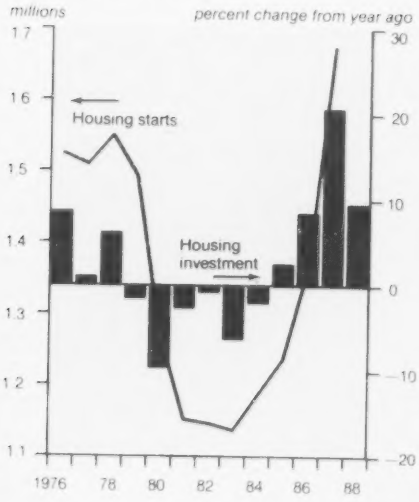


Chart 6

Housing starts and investment



Insofar as the 1987 speedup in domestic demand can be credited to government policy, the honors go principally to monetary policy. Money supply growth (as measured by M2+CDs) bottomed out in 1983 and trended higher to a peak of 12.4% year-on-year last November. Though domestic liberalization and yen internationalization muted the expansionary effect, last year's monetary growth certainly was not restrictive of real demand growth, still less of household asset values. As for fiscal policy, the economy's sluggishness early in 1987 induced the government to enact a Y5 trillion spending package, with more genuine spending than usual — about Y3 trillion spread over 1987 and 1988. In addition, following rejection of its grand design for revenue-neutral tax reform, the government conceded Y1.5 trillion in personal income tax cuts that boosted disposable income some 0.5% in 1987.

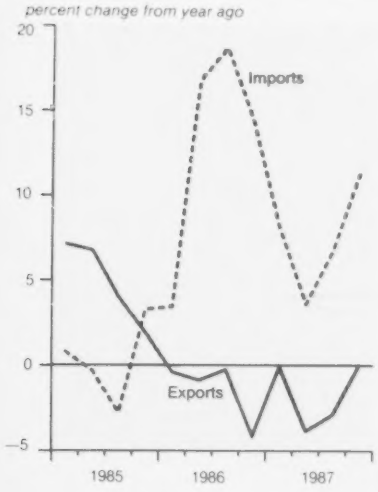
Household incomes further benefited in 1987 through low inflation, real earnings gains, and higher employment. Wholesale prices declined 3.8% on average in 1987: yen appreciation and oil price weakness forced down traded goods prices and utilities' charges; these declines outweighed modest domestically generated price increases for home-produced lumber, steel, and other construction materials. Tokyo consumer prices rose 0.4% on average in 1987, ensuring that nominal increases in average earnings largely provided real increases (see Chart 5). The employment picture turned around in the second half of the year. By this January, the job openings/applicants ratio reached its highest in over ten years. The unemployment rate peaked at 3.2% a year ago and has fallen to the 2.6%-2.7% range since October. Prosperity has been concentrated in Tokyo but has gradually diffused nationwide. Overall retail sales rose 4.9% last year, with electrical appliances and electronic goods surging 13.4%. New car sales rose 5.4%, to a record 6.02 million units; import sales jumped 43% — though they took only 1.6% of the domestic market.

Meanwhile, easier monetary policy and financial wealth effects stoked a housing investment boom. This began as a regular upturn in 1983, after housing prices, relative to incomes, declined to a five-year low. The boom started in 1986, as monetary growth accelerated. And in 1987 housing starts ran 47% above the low of 1983 (see Chart 6), exceeding the U.S. pace in absolute numbers. Lower interest rates, liberalized tax treatment, plus higher stock market and other asset values made housing loans more supportable. A lack of other investment opportunities pushed the private sector to unlock land as collateral, devise new financing methods, and experiment with longer maturities. Banks increased their housing loans by Y4 trillion in 1987, twice the 1986 pace and more than seven times the average of the previous four years.

For the future, the housing boom is imperiled by high land costs. Already these have boosted the ratio of housing prices to income to the level that prevailed just before the 1970s' slump began. Year-on-year growth in overall starts reached 31% last July but was down to 19% in January this year. The remaining strength in the owner-occupied sector is unlikely to offset the weakness emerging in rentals starts. Con-

Chart 7

Export and import volume



dominium prices already have softened in Tokyo. Moreover, prices of construction materials have eased in recent months. Housing investment still should contribute positively to 1988 GNP growth on a full-year basis, but may come to mimic the retreat that occurred in the early 1970s.

Given the positive employment trend, household consumption should stay strong in 1988, though capital gains and other wealth effects likely will be less potent than last year and there may be some slippage in real disposable income growth. In 1988 average nominal earnings would have to rise about 4% to maintain real income growth at last year's pace as inflation edges higher. While higher bonuses could help, wages would have to grow more rapidly than in 1987; publicized settlements in the so-called spring offensive, which tend to overstate the actual outcome, would have to reach 5%-5.5%. The strong yen makes employers reluctant to grant such increases. The government's fiscal plans also darken the consumption outlook; if implemented, they would tend to depress household disposable income and might not bring much reduction in household saving.

Table 2

Trade by product

billions of dollars, customs clearance basis

	1985	1986	1987
Exports	176	209	229
Machinery	126	155	171
Electrical products	46	57	64
Motor vehicles	38	43	45
Other	42	55	62
Imports, CIF	130	126	149
Excluding gold	128	119	146
Petroleum and products	43	26	29
Manufactures	38	46	66
Chemicals	8	10	12
Machinery	12	15	19
Other	18	21	35
Trade balance, CIF	46	83	80
Balance of payments basis, FOB	56	93	96

The trade turnaround

Spurred by domestic demand growth and the further rise in the yen, Japan's imports in 1987 rose more than 9% in volume terms on the GNP basis, including services, and by 7.2% on the customs clearance basis (see Chart 7). In dollar terms, goods imports rose 18.2% in total, and as much as 22% if gold is excluded (see Table 2). Sectoral import trends dovetailed with Japan's structural adjustment and demand expansion. Structural adjustment depressed domestic heavy industry and textiles output, in turn cutting imports of industrial raw materials. But it helped boost imports of steel 40% in dollar terms, and of metal products and textiles over 50% — albeit from low bases. The housing boom took lumber imports up 15%, while the recovery in consumption sparked a 49% rise in car imports.

The breadth of the import gains belies the notion that actual and potential foreign suppliers, including U.S. exporters, are generally unable or unwilling to use their newfound competitiveness to build market share in Japan. That may be true of some, whose best business strategy may be to maintain selling prices in yen terms in the Japanese market. Nonetheless, U.S. data show that FOB export and domestic selling prices have scarcely diverged for U.S. firms at large, are rising much less than U.S. import prices in dollar terms, and are down sharply in yen terms. Of course, Japan's internal distribution system may limit the "pass-through" of lower import prices to ultimate purchasers, if not, on average, to the extent suggested by casual consumer-level observations (these often confuse items imported from the United States and those sold by U.S. firms but produced in Japan or elsewhere).

Japan's exports of goods and services rose an estimated 3.5% in volume terms last year. The increase was confined to services, principally investment income. For goods alone, the yen's strength provoked a 7.1% drop in the volume of shipments to the U.S. market last year and a 2.1% shrinkage in export volume over-

Table 3

Bilateral trade balances

billions of dollars, CIF, customs clearance basis

	1980	1985	1986	1987
Total	—9	43	83	80
Industrial countries	12	49	59	71
United States	7	39	51	52
European Community	9	11	17	20
Developing countries	—26	—9	8	7
Southeast Asia	—1	3	13	14
Hong Kong	4	6	6	7
Korea	2	3	5	5
Singapore	2	2	3	4
Taiwan	3	2	3	4
China	1	6	4	1

all. The impact has varied greatly across industries. Producers of textiles, steel, and cement have clearly lost out relative to machinery producers. There were losers among the latter too. In 1987 vehicle exports, having slipped for the second straight year, ran 10% below their 1985 peak in unit terms; shipments of television sets plunged 60%, radio receivers 41%, and tape recorders almost 13% from 1985 levels.

Japanese exporters have found increasing compensation through higher prices. Manufacturers raised theirs 11.8% in dollar terms last year. Matching that increase against the dollar's 16.5% depreciation against the yen, the pass-through on Japanese exports averaged 71% — well up from 49% in 1986. Accordingly, despite the volume declines, the overall dollar value of Japan's exports in 1987 rose 9.6% above the previous year's level. This was enough, given the huge disparity between export and import levels, to hold the trade surplus close to the 1986 level. Indeed, the $3 billion decline in the surplus on the customs clearance basis became a $3 billion increase on the balance of payments reckoning.

Though Japan's overall trade surplus was much the same in 1987 as in 1986, its bilateral position weakened with countries where weak economic growth or rising commodity prices outweighed exchange rate influences. For example, its surpluses with China and Latin America shrank sharply; and its deficits widened with OPEC members, including Indonesia, and a few other commodity exporters. By contrast, Japan's surpluses with its main trading partners — the United States, Europe, and Southeast Asia — all expanded in dollar terms (see Table 3). Were global trade imbalances coming down satisfactorily, these widening Japanese bilateral surpluses would be of little concern economically. But the global picture is not satisfactory.

Japan's surplus with the United States rose $700 million last year, to $52 billion according to Japanese statistics. Excluding gold, the surplus actually diminished $2 billion. Sector surpluses shrank in steel, metals, automobiles, and textiles. Deficits widened in various commodities, chemicals, and aircraft. But most machinery sectors reported rising surpluses. So too did such sensitive areas as semiconductors and computers despite the retaliatory U.S. tariffs imposed last spring.

The slow pace of Japan-U.S. bilateral adjustment has much to do with the daunting arithmetic of correcting an imbalance in which Japan's exports to the United States are almost four times its imports. Another obstacle — not yet pressing, but potentially so if the U.S. economy continues to grow strongly — is the emergence of more pervasive capacity constraints on U.S. exports (so far, capacity shortages face only a few U.S. industries).

Yet another drag on bilateral adjustment, at least for the time being, stems from stepped-up Japanese direct investment in the United States. Japanese construction firms usually supervise the design and building of new plants, typically specifying Japanese machinery. With steadily rising investment, such machinery imports may hold up for some time to come (they may have contributed significantly to the more than 20% volume increase in total U.S. capital goods im-

ports during 1987 on a fourth-quarter/fourth-quarter reckoning). Once Japanese firms complete their projects and encourage their suppliers to follow suit, a growing proportion of the value-added in their U.S. sales will be U.S.-generated; with time, their U.S. production should displace Japanese exports and even engender U.S. exports to Japan. For example, Honda is exporting its first 540 U.S.-built cars to Japan this March, with a target of 5000 to be exported this year.

At the sectoral level, albeit to a much lesser extent overall, Japan-U.S. bilateral adjustment is hindered by trade policies. For example, in agriculture the United States seeks complete liberalization. Yet Japan is offering nothing on rice, merely expanded quotas for oranges, and a partial liberalization over eight years for beef premised on higher domestic production. On semiconductors, although Japanese firms no longer seem to be dumping chips in third-country markets, the two nations are at odds over foreigners' opportunities in Japan. As for construction, especially public works, foreign access remains minimal.

Tensions also afflict Japan's trade with Europe, where there is stiffening resistance to Japanese auto exports and complaints more broadly about "screwdriver" assembly plants that add little European value to Japanese parts exports. Japan's surplus with the EC reached $20 billion in 1987, up from $17 billion in 1986. While some of the increase reflected lower European gold exports to Japan, the yen's appreciation boosted the value of trade by raising prices in dollar terms and increasing the relative profitability and attractiveness of the European market. The bilateral surplus may prove stubborn in dollar terms, if less so in volume terms. On the positive side, Japan's deficits with Europe on chemicals and metals are expanding, the surplus on steel trade is stagnant, and the textiles surplus is declining. But Europe is doing less well in the machinery sector, which alone accounts for two-thirds of the bilateral trade total; here, the Japanese surplus rose 20% last year, as did the surplus on automobile trade despite the sales successes of European cars in Japan.

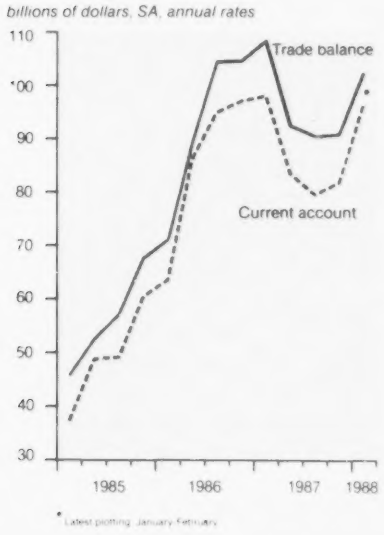
Japan's surplus with the four principal Asian NICs hit $20 billion in 1987, up $3 billion from 1986. Hong Kong, Singapore, and Taiwan each saw their bilateral imbalances widen, leaving Korea a noteworthy exception. The rise in Japan's surplus not only reflected higher Japanese export prices in dollar terms but also the shift of assembly and low-technology production to the region. In most cases the shift has boosted Japan's exports to, but not substantially Japan's imports from the region.* Southeast Asian production is pressuring some Japanese products and industries, but is far from displacing Japanese output in the aggregate. "Hollowed out" is not a credible characterization of today's Japan, nor of tomorrow's.

To sum up, 1987 marked a step forward in Japan's trade adjustment. On a year-on-year comparison, the trade surplus trended lower from May onward and the

*Japan's machinery exports to Southeast Asia grew $7.8 billion last year, but imports just $1.2 billion. Still, in some industries with standardized products the gap has narrowed, or even reversed: for Japan, trade in textile manufactures swung from near-balance in 1986 to a deficit of $1.2 billion in 1987; and although the surplus on steel trade expanded from $3.5 billion to $3.7 billion, it almost surely rested on a reduced volume of net exports.

Chart 8

Trade and current account balances



current account surplus, though totaling $86.7 billion in 1987, shrank to 3.6% of GNP from a peak of 4.4% in 1986 (see Chart 8). Volume trends continued constructive, if somewhat hesitant toward year-end. For 1988, higher prices in dollars are expected to cut further into Japan's export volumes, slowing the growth in dollar export earnings. Strong domestic demand and the appreciated yen should boost imports smartly, principally of manufactures. On the customs clearance basis, the trade surplus may drop $11 billion. But, as investment income continues to rise on Japan's net external assets, the current account surplus may narrow only $8 billion, to a still-massive $79 billion.

Problematic policy trends

The prospective narrowing of Japan's external surpluses in 1988 delivers a negative contribution to Japan's economic activity amounting to some 0.9% of GNP. Fortunately, business investment is in cyclical upswing and both domestic consumption and housing investment have begun the year with considerable momentum. Even if both slow during the course of 1988, as seems especially likely for housing investment, overall domestic demand could average 5.4% above the 1987 level. That would allow real GNP growth of 4.2% this year — essentially repeating last year's result and within the 4%-5% range that most observers judge to be Japan's potential. And, by coupling a strongly positive domestic contribution with a sizably negative external contribution, Japan's growth is unlikely to provoke serious criticism.

Yet with their views of Japan's potential still colored by the much lower domestic demand growth of the early 1980s, the authorities are reasserting the need for fiscal discipline. A tightening of fiscal policy has been penciled into the draft budget for FY1988. The "General Accounts" deficit should be down by 0.6 percentage point to 2.4% of GNP, barely half the level of the late 1970s (see Table 4). Combined, all levels of government may well move into surplus. New savings taxes will take effect on April 1 and will substantially undo last year's personal tax cuts. On the spending side, public works outlays are to rise only slightly in the new fiscal year. Spending by local governments and through the central government's Fiscal Investment and Loan Program should expand some. But central government's General expenditures — the principal spending conduit — are expected to dip below the current level while increases in its other spending merely reflect debt servicing or revenue pass-through to local budgets.

It is hard to describe all this as expansionary. A slower rate of expenditure reduction does not add up to an increase in spending. More important, the fiscal posture cannot be evaluated solely from initial budgets; two sizable supplementaries were enacted in 1987, whereas 1988 may see none of substance. Adjusted also for cyclical factors, the fiscal stance of the government at large looks neutral at best this calendar year.

Moreover, now that currently strong domestic demand has quelled calls for renewed stimulus, the Ministry of Finance (MOF) has reasserted two earlier aims: to complete a revenue-

Table 4

*Government budgets**

fiscal year data; annual average percent change, except as noted

	1975-1979	1980-1986	1987	1988
General Accounts				
Tax revenues	9.6	8.5	2.9	4.6
Expenditures	15.2	4.9	7.8	—2.6
"General"	14.6	2.7	7.2	—3.7
Social welfare	19.6	4.0	0.0	2.9
Public works	17.6	0.6	4.0	0.8
Defense	11.3	6.0	5.4	5.2
Fiscal Investment and Loan Program	12.3	4.6	10.8	2.8
Local Public Finance Program	13.0	3.3	4.0	5.3
Fiscal balances, percent of GNP				
General Accounts	—4.9	—4.5	—3.0	—2.4
*General government***		—2.8	—0.8	0.0
*Cyclically adjusted annual change****		0.5	0.6	0.2
Memo				
Consumer prices (Tokyo)	7.4	3.2	0.4	1.3

*FY1988 figures are from the draft initial budget and assume no supplementaries; FY1987 figures include the two supplementaries. For both years, general expenditures and public works include spending financed by sales of telephone company equity. Fiscal Investment and Loan Program figures exclude certain managed funds not allocated for spending.

**Combines all levels of government; calendar year estimates by OECD through 1986. The general government balance, which includes fairly stable social security surpluses but excludes proceeds from sales of the government's telephone company holdings, has tended toward surplus mainly through lower deficits in the General Accounts.

***About 0.1% in 1987, excluding windfall capital gains taxes.

Table 5

Tax reform proposals

trillions of yen

	Original	Current
Tax cuts		
Individuals	2.7	3.5*
Corporations	1.8	1.4
Tax increases		
Savings	1.6	1.6**
Indirect taxes	2.9	3.0
Miscellaneous	0.0	0.5

*Including Y1.54 trillion effective in FY1987.

**Effective April 1, 1988.

neutral and base-broadening overhaul of the tax system; and to eliminate deficit bond issues by FY1990, at the same time limiting construction bond issues.

The current tax reform plan is essentially unchanged from the one first approved by the governing Liberal Democratic Party (LDP) in late 1986 (see Table 5). Although the current plan offers a miniscule overall net tax cut of Y0.4 trillion, it could well dampen domestic demand. In the version proposed by the LDP this winter, a value-added tax (VAT) would be introduced in FY1989 to raise Y3 trillion annually, of which Y2 trillion would be returned to consumers through other tax cuts. On balance, their disposable income and likely spending would be reduced. That would have negative implications for business investment, notwithstanding the incentives conferred by the planned Y1.4 trillion cut in business taxes.

Besides its problematic macroeconomics, the plan has stirred considerable opposition, in part because the VAT proposal conflicts with official positions taken some years ago. There is awareness too that, once enacted, raising the VAT above the 3% introductory rate would pose little administrative difficulty. A recent and vaguely worded agreement between the governing and opposition parties has been less explicit about full offset of tax cuts with a new sales or VAT-style tax, but revenue neutrality still seems to dominate MOF discussions.

In any case, the plan fails to address major public concerns. In particular, it shirks real reform of existing tax policies that aggravate Japan's critical housing problem. These policies discourage development of underutilized land in the metropolitan areas; and, as measured by relative tax expenditures, they provide barely one-twentieth the level of U.S. housing support.

Shortcomings in tax policies are accompanied by a parsimonious approach to public spending. On MOF's revenue assumptions, its deficit goal requires that medium-term spending growth be held to just 0.7% annually. Yet the desire to avoid excess does not by itself demonstrate that spending growth should be held far below GNP growth. For example, better living conditions demand more public spending to improve transportation — to enlarge practical commuting areas — and to develop other infrastructure befitting a larger and more prosperous population.

To resist spending demands, the government frequently invokes the specter of insupportable demands on the social security system generated by rapid increase in the over-65 population and higher spending per beneficiary. The specter is not compelling. Even by the year 2025, a recent IMF study concluded, Japan's social expenditures on health, education, and welfare look set to be a smaller fraction of GNP than France and Germany spent in 1980. Besides, to the extent that public provision replaces private, there is no added burden on the economy.

The official stance on fiscal policy would be correct were medium-term real GNP growth sure to match Japan's potential. But the potential is unlikely to be realized on a sustained basis if fiscal tightening resumes as planned. The opposite course makes more sense. For one thing, Japan can readily finance an easier fiscal policy; after all, the net public-sector debt has

Table 6

Public debt*

percent of GNP

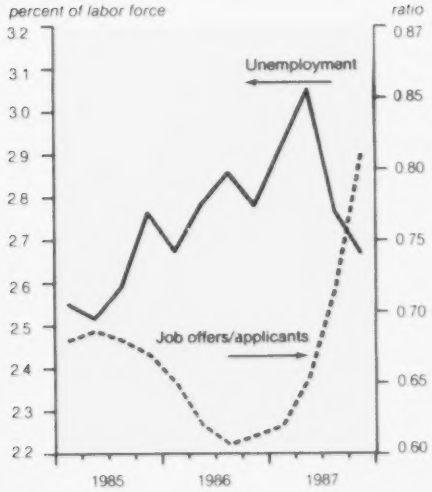
	1973	1979	1983	1986
Gross				
Japan	17	47	67	69
United States	41	37	44	51
Germany	19	31	41	42
France	25	26	30	36
United Kingdom	70	56	54	54
Net				
Japan	—6	15	26	26
United States	23	19	24	29
Germany	—7	12	21	22
France	8	20	13	19
United Kingdom	58	49	47	47

*All levels of government. In Japan gross debt vastly exceeds net debt thanks to cross-holdings among government accounts

Source: OECD.

Chart 9

Labor market conditions



stabilized at a moderate ratio to GNP (see Table 6). For another, easier fiscal policy would permit a desirable shift in the "mix" toward less accommodative monetary policy.

For several years past, the government's fiscal stringency has inclined it to a relatively easy monetary policy. This has served the twin purposes of fortifying economic growth and containing upward pressure on the yen. Over the past year, success in the first purpose has been more evident than in the second. Additional monetary ease now holds little attraction for the Bank of Japan.

Last summer, the stable yen ordained by the ill-starred Louvre Accord joined with rising commodity and construction material prices to fan inflationary fears in Japan. Those fears subsequently have eased, not least because the yen has been allowed to rise. Even so, consumer price inflation is likely to creep upward in 1988 to perhaps 1.4% by year-end and some 2% in 1989-90. There is, however, some risk to this comforting inflation outlook from the tightening labor market portrayed by the closely watched job offers/applicants ratio (see Chart 9).

Another inflation risk lies with the 12% trend growth in Japan's money supply (see Chart 10). In part this high growth is accommodating rising foreign demand for yen. When, from time to time, Japan intervenes to stem the yen's appreciation, whether caused by short-run speculative interest or the currency's growing internationalization, the intervention only has lasting success if not sterilized; but nonsterilized intervention, since it is not offset by an equivalent bond sale, raises Japan's money supply. Domestic financial liberalization can do likewise, as was seen in 1987 following the reduction in minimum denominations for three types of deposits that pay market-related interest rates. Further liberalization is due this April. If "nonmoney" shifts into "money," measured money growth again will be inflated. Still, neither internationalization nor liberalization rationalizes 12% money growth indefinitely.

With a tightening fiscal policy, a monetary goal of 9%-10% growth in M2+CDs looks reasonable for the long haul: 4%-5% for real GNP growth, 2% for inflation, and the rest for internationalization and liberalization. Yet if monetary growth is relied on to achieve GNP growth at potential, the yen would come under less upward pressure — and Japan's real output growth would embody less external adjustment — than under the opposite policy mix of fiscal ease and monetary restraint. For purposes of global adjustment, fast GNP growth is welcome but not sufficient. What matters as much is the domestic/external composition of GNP growth. More than anything, that composition responds to the policy mix through the exchange rate.

The inevitability of a higher yen

During the final days of 1987 the yen ran up as high as Y120 to the dollar. Its real broad effective exchange rate hit 146 on a 1980 =100 basis. And its real value relative to the dollar alone surpassed even the record peak in October 1978. In the first two months of 1988 the dollar rate averaged Y129 as reports of lower trade surpluses for Japan and lower deficits for the United

Chart 10

Money supply: growth and velocity

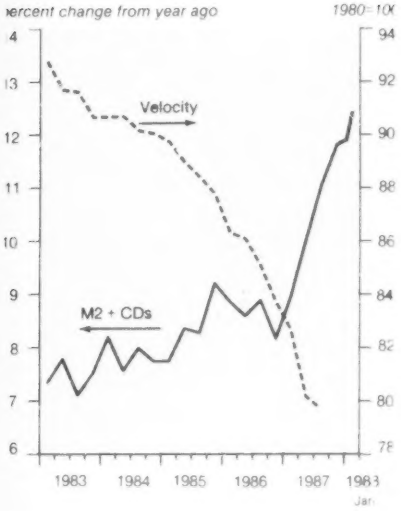


Table 7

Summary outlook

percent change, except as noted

	1987	1988	1989	1990
Real GNP	4.2	4.2	3.2	3.3
*Domestic contribution**	5.0	5.1	3.7	3.6
*Foreign contribution**	—0.8	—0.9	—0.5	—0.3
Domestic demand	5.1	5.4	3.9	3.8
Consumption				
Personal	3.9	3.5	3.4	3.2
Government	—0.5	2.4	2.8	2.8
Investment				
Business fixed	8.3	8.6	6.6	5.9
Residential	20.6	9.5	1.0	1.7
Government fixed	8.4	9.0	3.2	4.1
*Change in inventory investment***	—0.3	0.3	0.1	0.0
Exports	3.5	3.8	1.1	2.4
Imports	9.1	10.9	4.9	3.4
External accounts				
$ billions				
Trade surplus, CIF	80	69	54	45
With United States	60	56	52	46
Current account	87	79	70	68
Percent of GNP	3.6	2.7	2.0	1.6

*Percentage points.
**Percent of GNP.

States encouraged the view that the yen's nearly three-year climb was due for a pause. Yet already Japan's real net export decline has slowed. It could halt altogether, barring major economic growth or policy surprises. Equally, the trade and current account surpluses may not continue to fall much longer.

That may seem a pessimistic prognosis, given the widespread impression that the yen has overshot "purchasing power parity." Although this criterion appeals to an idealized sense of fairness in international trade, it poses measurement difficulties in practice. More important, it largely misses the point in assessing what it takes to accomplish growth-oriented global trade adjustment. By and large, Japanese industry has come to terms with the present level of the yen. Besides, studies of industrial-country experience find unusually low exchange rate responsiveness of Japan's trade, both exports and imports.

It is little wonder that the trade adjustment induced by yen appreciation falls short of the more optimistic expectations, leading some to conclude that further appreciation would be counterproductive. It would not have to be, for the adverse effects on growth can be offset by government action, however distasteful, to official opinion. Besides, if trade responsiveness to currency adjustment is low, the logical conclusion is that imbalance correction requires major currency change.

If the yen rises, in real as well as nominal terms, the reduction in the trade surplus in hand for 1988 should continue into future years. Assuming fiscal policy returns to the more restrictive course suggested in the 1988 budget, Japan's real GNP growth could slip to 3%-3.5% annually before long (see Table 7). This year's projected 5.4% rise in domestic demand could be down to 3.8% two years hence. Shrinkage of Japan's real net exports might fade from 0.9% of GNP this year to only one-third as much by 1990, leaving the overall trade surplus close to $45 billion.

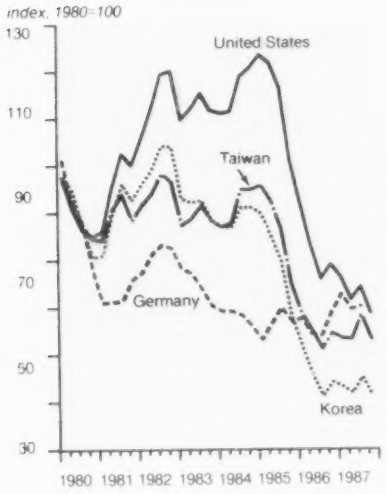
Awkwardly, the surplus with the United States alone might be at much the same level. Moreover, bearing in mind the secular rise in investment income, Japan's current account surplus could be as much as $68 billion even in 1990. That would be less than 2% of Japan's GNP and thereby acceptable to those who believe Japan destined to run a substantial structural surplus. Yet a sustained surplus of such magnitude surely would cast a long shadow over the world financial scene.

One way or another, more adjustment will have to be achieved. The best solution would have Japan's policymakers take the initiative to sustain domestic demand growth close to the 5%-6% growth rate experienced since last spring, while conceding yen appreciation to prevent overheating of the economy. Given Japan's fiscal plans, such a positive outcome seems highly unlikely. The alternative solution lies through a much higher yen. In this, the markets likely would take the initiative, since it is hard to see them sitting still for a slim $20 billion reduction in Japan's current account surplus over a three-year period. Once the markets judge the time is right for the yen to resume its upward course against the dollar, the Bank of Japan would be unwise

Chart 11

Japan's competitiveness in manufacturing

ratios of selected countries' prices to Japan's



to intervene with any enduring determination. Massive nonsterilized intervention would make a farce of domestic monetary restraint.

Of course, the Japanese authorities would prefer that the yen not be alone in its ascent. There is particular sensitivity about the exchange rate practices of the principal Asian NICs, whose competitiveness — particularly Korea's — is a nagging worry to much of Japanese industry even as these countries provide attractive locations for offshore production. Chart 11 indicates that since early 1985, and also over the longer haul since 1980, the NICs' price competitiveness vis-à-vis Japanese industry has benefited hugely by exchange rate changes. Understandably, Japanese firms are concerned, not merely at increased penetration of Japan's domestic market but also for the world market implications. So too are European and U.S. firms. The established industrial nations are keen that the Asian NICs, as significant players in the globalization of output and finance, play by a fair and predictable rule book, including rules on exchange rate policies.

It would be unrealistic to seek speedy development of an Asian regional exchange rate arrangement along the lines of the European Monetary System. After all, there is a history of cultural and political differences and rivalries among the Asian countries. Their economies vary widely in industrial maturity and sophistication, per capita income, and capital market development. Besides, the direct trade links among the Asian economies are weak compared with those among European economies, even those that existed when the European Community was founded.

Yet Japan and the Asian NICs have an important mutuality of interest in that all have the United States as their principal export market (see Table 8). In the past, as exemplified in the choices of the Korean steel and automobile industries, both accessibility and profit potential obliged the NICs to go for the North American market. Collectively, the Asian NICs ran a $38 billion surplus last year in their U.S. bilateral trade (U.S. CIF value), up $7 billion from 1986 and partly reflecting displacement of Japanese exports. Some of the NICs' exports to the West are the product of Japanese direct investment in the NICs, and many more are vitally dependent on Japanese components. Moreover, responding to the same concerns that Japanese firms have had for assured access to their key foreign market, NIC-

Table 8

Trade orientation, 1987

	Exports		*Jan-Sep % shipped to*				
	$ billions	*% of GNP*	*United States*	*Japan*	*Europe**	*Selected NICs***	*Other*
Japan	224	9	37	—	12	17	34
Hong Kong	48	107	29	5	12	10	44
Korea	46	38	39	17	11	8	25
Singapore	27	138	24	9	9	11	47
Taiwan	53	54	45	12	12	10	22

	Imports FOB		*Jan-Sep % sourced from*				
	$ billions	*% of GNP*	*United States*	*Japan*	*Europe**	*Selected NICs***	*Other*
Japan	128	5	22	—	9	12	57
Hong Kong	44	97	9	19	9	17	46
Korea	39	33	22	34	10	4	30
Singapore	30	155	15	21	10	10	44
Taiwan	32	33	21	35	10	5	29

*France, Germany, Italy, and United Kingdom.
**Hong Kong, Korea, Singapore, and Taiwan.

based companies are beginning to invest in U.S. production facilities.

Thus from the U.S. or a more broadly global view, there is a linkage between Japan and the Asian NICs that none can afford to ignore. More extensive consultation within the region would aptly recognize the reality that the rest of the world increasingly views it as an economic unit. The overall current account surpluses being run by these NICs — especially by Korea and Taiwan, to the tune of $10 billion and $21 billion respectively in 1987 — are compelling reason for appreciation of their currencies. Taiwan has allowed its currency to rise 24% against the dollar since end-1986 while also taking steps to liberalize a highly protected home market. But Korea has been very reluctant to accept that its surplus, which has far outpaced expectation, requires more than token corrective measures. During the past year, Korea has conceded a modest 8% appreciation of the won against the dollar, but most observers believe that substantially greater appreciation will be necessary to curtail its surplus. Hong Kong has come under pressure from the U.S. administration to revalue its pegged currency. Its trade surplus hit $4.6 billion last year, up $1.2 billion from 1986, and it presumably moved further into current account surplus. Revaluation by Hong Kong, besides helping contain its surplus, would provide cover for more sizable moves by Korea and Taiwan.

Still, currency actions by the NICs do not relieve Japan of the need to let the yen go higher. To the contrary, as and when the NICs' currencies rise, the degree of yen appreciation against the dollar required to correct Japan's surpluses will increase — not diminish. The only way to lessen the required yen appreciation is for Japan to recommit itself to expansionary domestic economic policies, while the United States tries yet again to restrain its own appetite for domestic growth. With adjustment-supporting domestic policies from all G-5 members, it is reasonable to conjecture that U.S. external adjustment will require quite moderate additional effective depreciation of the dollar, perhaps no more than 10% in *real* terms, provided this were sustained. Without good domestic policies, the needed real depreciation of the dollar could be substantially greater. Some could come about through currency appreciations by Europe, the Asian NICs, and, to a modest extent, Canada. Still, given Japan's demonstrated capacity to digest appreciation, there is a presumption that the yen would have to rise by distinctly more than the average, in particular, by more than the EMS currencies.

Table 9

*Japan's external assets and liabilities**

billions of dollars, end of year

	1981	1986	Est. 1987
Total assets	209	727	1090
Private sector	152	632	935
Banks' claims	85	345	545
Direct investment	25	58	80
Other	42	229	310
Memo			
Long-term securities	32	258	350
Government sector	57	95	155
International reserves	29	43	81
Long-term loans and credits	21	35	43
Other	7	17	21
Total liabilities	198	547	860
Private sector	171	494	790
Banks' liabilities	100	346	545
Direct investment	4	7	9
Other	67	141	156
Memo			
Long-term securities	44	144	160
Government sector	28	53	70
Long-term securities	20	40	55
Other	8	13	15
Net assets	11	180	230
Private sector	—19	139	145
Government sector	29	42	85

*Asset and liability figures reflect recorded capital flows as well as the valuation effects of exchange rate and security price movements. Because liabilities denominated in yen and other nondollar currencies exceed assets denominated in these currencies, the sharp appreciation of these currencies against the dollar since 1985 has resulted in smaller increases in Japan's net assets measured in dollar terms than implied by Japan's current account surpluses.

Totals may not add due to rounding.

Source: Data for 1981 and 1986 are from Bank of Japan, *Balance of Payments Monthly* and Bank for International Settlements, *International Banking Developments*. Data for 1987 are our estimates.

Japan's foreign investments

To no one's surprise — given its massive current account surpluses and corresponding net investment flows abroad — Japan has become the world's largest net creditor nation. By the end of last year, Japan's net external assets reached an estimated $230 billion, up from $10 billion a scant six years earlier (see Table 9). That net asset accumulation, continuing apace, already dwarfs the U.S. international investment position at its peak in 1981 when U.S. net assets reached $141 billion.

Japan's rapid rise to the number one position — with gross external assets of nearly $1.1 trillion, accompanied by $860 billion in gross liabilities — reflects not only large current account surpluses but also the growing role of Japan's financial markets and institutions as international intermediaries. Liberalization and deregulation of the domestic market have enhanced this role. Additionally, a mounting volume of domestic financial activity is being channeled through international markets. This, in turn, is prompting further domestic deregulation.

All of this, as in the case of the surpluses of the OPEC of yesteryear, has focused new attention on Japanese overseas investment, both private and official. The portfolio preferences of Japanese investors are closely monitored for their impact on exchange rates and asset prices in global financial markets. Japan's responsibilities for recycling its surpluses to hard-pressed developing countries have become an issue. So, too, has the scale of Japanese foreign investment, especially as its weight has shifted from securities to more politically sensitive areas, such as direct investment and real estate.

Banks' expanding role

Nowhere is Japan's rapidly expanding international intermediary role more evident than in its banking sector. Gross external assets and liabilities of banks in Japan (including branches of foreign banks) soared from less than $130 billion at the end of 1984 to more than $500 billion by September 1987 (see Table 10). Those totals include Japan's offshore market, which was launched at the end of 1986 and grew to nearly $170 billion by the end of last September. At that time, total cross-border assets and liabilities of banks in Japan for the first time exceeded those of banks in the United States (including IBFs and the U.S. branches and subsidiaries of foreign banks).

Surprisingly, Japanese banks have not been a major channel of net capital outflows. Japanese banks' net external assets at the end of September 1987 amounted to only $2 billion. Between December 1984 and September 1987, their cross-border activity resulted in $9 billion in net capital inflows, and less than $1 billion in net outflows in the first three quarters of 1987. Even so, banks in Japan have become increasingly heavy net short-term borrowers from nonresidents (mostly other banks) and equally larger net long-term lenders and investors abroad. By the end of last year, their net short-term liabilities to nonresi-

Table 10

External assets and liabilities of banks in Japan*

billions of dollars, end of period

	1985	1986	Sep 1987
Total assets	195	345	509
Foreign currency	121	207	279
Yen	74	138	231
Long-term	95	151	198
Short-term	100	195	311
Total liabilities	179	346	507
Foreign currency	130	255	334
Yen	50	91	173
Long-term	18	24	14
Short-term	161	322	493
Net assets	15	—1	2
Foreign currency	—9	—47	—56
Yen	24	46	58
Long-term	77	127	184
Short-term	—61	—128	—182

*Totals may not add due to rounding.

Table 11

Japanese residents' net purchases of foreign securities by type of investor

*net flows in billions of dollars**

	1985	1986	1987
All banks (banking accounts)	12.2	13.0	7.6
Trust accounts	11.8	29.8	13.1
Life insurance companies	3.9	15.0	21.0
Postal system	1.6	3.1	3.5
Other reporters	6.8	9.4	2.5
Unclassified	23.5	31.7	40.1
Total	59.8	102.0	87.8

*Yen flows converted at period average dollar-yen exchange rates.

dents exceeded $200 billion, closely matched by net long-term assets abroad.

In addition to term lending, Japanese banks have made sizable purchases of medium- and long-term securities, ranging from Euro-FRNs to U.S. Treasury bonds, that were funded by short-term borrowing in the international interbank market. Last year, however, it appears that Japanese banks played bond yield curves less aggressively than before, judging from the reported drop in their net purchases of foreign securities to less than $8 billion from $12-$13 billion a year in 1985-86 (see Table 11). Banks also continued to increase their net yen-denominated assets last year, while increasing their net foreign-currency-denominated liabilities. By end-September 1987 their net yen assets reached the equivalent of $58 billion, up $42 billion from end-1984 when the dollar was close to its peak.

Shifting investment patterns

The overall level of Japanese long-term investment abroad in 1987, at $133 billion, was little changed from the previous year (see Table 12). Increases in direct investment and loans were counterbalanced by reduced foreign security purchases. For example, buying of foreign securities in the fourth quarter amounted to only $41 billion at an annual rate, compared with a $117 billion rate in the first half of 1987 — reflecting investor caution in the face of a weakening dollar, volatile interest rates, and the October stock market crash. As the year progressed, an increasing portion of foreign security purchases was financed by short-term borrowing abroad, by nonbank financial institutions, and by nonfinancial corporations as well as by banks.

For the year as a whole, net purchases of foreign bonds fell about $20 billion — to $73 billion. Within the reduced total, the U.S. share slipped to 50% from 55% in 1986 and a peak of 69% in 1985 (see Table 13). German bonds, U.K. gilts, and non-U.S.-dollar-denominated Eurobonds were the main beneficiaries. Despite a marked slowing in purchases after the October crash, Japanese investors last year added $17 billion to their net holdings of foreign equities, up from $7 billion the previous year. Close to 70% was spent on U.S. equities.

Flows of Japanese direct investment overseas amounted to some $20 billion last year, triple the amount in 1985. Close to half may have gone into the United States as Japanese companies sought to secure their market positions in the face of yen appreciation and trade frictions. Japanese financial institutions also stepped up their investments as part of their larger role in U.S. financial markets. Some estimates place Japanese purchases of U.S. real estate at $6-$7 billion last year, up from $4-$5 billion the previous year.

Foreigners actually withdrew nearly $4 billion in long-term capital from Japan last year (see Table 12). The main factor was nearly $43 billion of net sales of Japanese equities — half of them in October and November. Foreigners showed increased interest in fixed-income securities, however, with acquisitions of Japanese bonds reaching nearly $37 billion, more than double the year earlier. The bulk ($30 billion) went into new issues by Japa-

Table 12

Japan's long-term capital flows*

billions of dollars, minus sign indicates a net outflow

	1985	1986	1987
Japanese investment abroad	—81.8	—132.1	—133.4
Direct investment	—6.5	—14.5	—19.5
Loans and trade credits	—13.2	—11.1	—17.3
Securities	—59.8	—102.0	—87.8
Stocks	—1.0	—7.0	—16.9
Foreign bonds	—53.5	—93.0	—72.9
Yen bonds	—5.3	—1.9	2.0
Other	—2.3	—4.5	—8.8
Foreign investment in Japan	17.3	0.6	—3.7
Direct investment	0.6	0.2	1.2
Loans and trade credits	—0.0	—0.1	—0.2
Securities	16.7	0.5	—6.1
Stocks	—0.7	—15.8	—42.8
Domestic bonds	4.5	—2.1	6.7
External bonds	12.9	18.4	30.1
Other	—0.1	—0.1	1.3
Net long-term capital flows	—64.5	—131.5	—137.1

*Totals may not add due to rounding.

Table 13

Geographical distribution of net foreign bond purchases

shares of total in percent

	1985	1986	1987
United States	69	55	50
Canada	4	8	2
Euromarket*	18	25	28
United Kingdom	5	6	7
West Germany	0	1	4
Switzerland	0	0	0
Australia	2	0	2
Others	2	5	7

*Bonds listed in Luxembourg.

nese borrowers in international markets, where Japanese borrowers were by far the largest national group of issuers and accounted for 25% of gross new issue volume. Foreigners also acquired nearly $7 billion of domestic yen bonds during the year, with net purchases exceeding $9 billion in August through December when expectations of yen appreciation became pronounced.

Foreign direct investment flows into Japan amounted to $1.2 billion last year — to reach a cumulative total of $8 billion. Although a new high, the inflow was minuscule compared with foreign investment in other industrial nations. Japan has never particularly welcomed direct investment and now, of course, the yen's high value is a deterrent.

Financing the LDCs

Japan has made tentative moves to direct more of its capital flows to the developing nations. The government budgeted an 8.2% increase in foreign aid in yen terms for the fiscal year ending this month, to be followed by an 8% increase in the coming fiscal year. Yen appreciation has pulled Japan's official development assistance above that of all industrial countries except the United States when measured in dollar terms, but it remains low in relation to GNP at 0.29%. In late 1986 and 1987, Japan announced plans to recycle $30 billion to LDCs over three years. Close to 60% was to be channeled through multilateral organizations — notably the World Bank and its International Development Association, the Asian Development Bank and its soft loan fund, and the IMF — with perhaps half to be provided by Japanese private-sector purchases of bonds issued by those organizations. Another $9 billion was to consist of expanded cofinancing by Japan's Overseas Economic Cooperation Fund and Export-Import Bank with private lenders. The latter would be expected to put up a majority of the money. Finally, $3 billion was slated for direct, untied loans to LDCs by the Export-Import Bank. Perhaps as much as half the $30 billion has been committed, but only a modest portion has been distributed.

It appears increasingly certain that Japan will be called upon to play a larger role in providing LDC financial assistance, as befits the world's largest creditor. If, as also seems likely, private lenders and investors are reluctant to take LDC risk directly, the government will have to step up its own risk-taking. Clearly, the world will be watching closely to see how promises are translated into actual disbursements. The government also can expect calls for a larger share of its financing for LDCs to be on concessional terms.

Growing Importance

With Japanese investors and financial intermediaries now major players in a number of other countries' domestic markets as well as in Euromarkets, their preferences will exert far-reaching effects on exchange rates and asset prices. The international mobility of Japanese capital is growing rapidly as investors become more willing and able to shift funds among markets and trade actively within them. The impact of Japan's monetary and fiscal policies is

sure to spread quickly overseas. Similarly, changes in Japanese regulatory, tax, and accounting rules are bound to influence markets abroad in important ways. All this puts added responsibilities on Japanese policymakers. More and more, their decisions at the macro and micro levels will reverberate swiftly throughout global markets.

Statistical appendix

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Effective exchange rates — industrial countries

Index numbers, 1980-82 average=100.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Netherlands	Spain	Switzerland	Denmark	Norway	Sweden
Nominal against 15 other industrial-country currencies																
1983	114.2	100.8	107.8	92.0	87.3	107.5	90.3	91.6	103.6	90.0	105.0	78.4	111.5	96.4	99.5	82.2
1984	122.3	97.3	112.9	94.2	84.4	107.3	86.7	88.1	103.6	88.9	103.9	77.4	110.5	93.9	97.8	84.3
1985	127.0	92.6	115.9	76.3	85.5	107.8	82.1	88.2	104.2	89.6	104.0	75.6	109.5	95.1	95.6	83.9
1986	106.0	87.6	150.1	61.4	87.4	116.1	82.9	80.7	107.8	92.9	110.3	73.4	118.1	99.7	89.2	81.6
1987	94.1	89.6	164.4	58.3	87.1	122.0	82.3	79.0	110.8	95.6	114.6	73.1	123.1	102.8	85.7	80.1
1987																
March	96.0	90.5	157.9	58.3	87.3	121.7	83.3	78.1	110.3	95.7	114.1	71.1	121.4	103.7	84.8	80.6
April	94.0	90.2	165.9	59.1	87.2	121.4	82.9	78.8	110.0	95.5	114.1	71.1	123.0	103.2	85.3	80.6
May	93.5	88.4	168.2	58.7	87.1	121.7	82.1	79.8	110.1	95.6	114.3	71.4	123.8	103.6	85.8	80.4
June	94.8	88.8	164.7	59.9	87.1	121.6	81.8	79.1	110.2	95.6	114.3	71.9	122.7	103.4	86.5	80.5
July	96.0	90.0	159.1	60.0	87.2	121.4	81.6	79.2	110.2	95.4	114.2	72.5	122.2	102.4	87.2	80.4
August	95.7	90.0	162.7	59.8	86.8	121.3	81.5	78.9	110.1	95.2	114.1	73.6	122.6	101.3	87.3	80.2
September	93.9	90.3	165.4	60.5	86.9	121.5	81.7	79.6	110.1	95.3	114.4	74.6	122.7	101.0	87.4	79.7
October	93.4	90.7	165.1	58.9	86.7	121.3	81.7	80.0	115.7	95.1	114.5	75.9	122.3	101.3	87.0	79.6
November	90.0	89.3	171.2	54.3	86.7	123.6	81.2	81.5	110.9	95.6	115.9	75.6	125.4	102.5	85.2	79.2
December	87.4	89.4	178.6	55.1	87.0	123.8	81.4	81.9	110.8	95.8	115.9	75.2	126.9	103.0	83.5	78.9
1988																
January	87.4	91.0	179.8	55.1	87.2	123.4	81.3	81.2	110.7	95.6	115.8	74.8	126.5	103.0	84.6	79.1
February	88.2	92.6	179.3	56.0	86.8	122.9	81.0	80.8	110.7	95.4	115.6	75.0	125.1	102.8	85.4	79.7
January 29	87.7	91.7	180.6	55.9	87.1	123.0	81.1	80.7	110.6	95.5	115.7	74.7	126.4	102.9	85.2	79.2
February 5	88.1	92.3	179.9	55.9	87.0	122.9	81.0	80.5	110.6	95.4	115.6	75.0	125.6	103.0	85.4	79.4
12	88.3	92.6	179.1	56.0	86.8	122.9	81.0	80.6	110.7	95.3	115.6	75.0	125.2	102.7	85.2	79.6
19	88.5	92.7	178.4	56.6	86.7	122.8	80.9	80.8	110.8	95.2	115.6	75.0	124.8	102.8	85.4	79.7
26	88.0	92.6	179.7	55.6	86.6	122.9	81.0	81.1	110.7	95.4	115.6	75.1	124.8	102.8	85.5	79.9
March 4	87.7	93.4	17[illegible]	56.7	86.6	122.9	80.9	81.3	110.8	95.4	115.6	75.3	124.1	102.8	85.6	80.0
11	86.3	93.1	179.4	56.7	86.4	123.0	80.6	83.5	110.8	95.3	115.5	75.5	124.2	102.7	84.8	79.8
Real against 15 other industrial-country currencies																
1982	109.3	100.6	92.4	105.7	97.3	99.9	98.5	98.8	101.2	91.9	100.5	98.9	103.0	97.9	103.2	95.6
1983	112.7	102.6	96.8	101.8	94.7	101.0	101.1	93.1	102.0	88.6	100.8	88.9	105.1	100.4	102.0	90.8
1984	119.6	100.2	97.8	106.4	97.0	98.0	101.8	90.2	103.0	85.9	97.8	91.1	100.1	99.2	100.5	96.0
1985	121.7	96.4	99.0	88.9	100.4	96.6	100.2	92.8	103.2	85.2	96.5	92.4	97.9	101.2	99.3	96.8
1986	100.9	93.3	122.2	78.4	103.8	103.3	102.6	87.3	106.5	84.6	101.4	93.9	105.5	107.4	96.9	96.0
1987	90.2	96.4	127.9	80.4	105.2	106.2	103.6	87.5	110.3	84.3	104.4	95.7	109.4	111.6	100.3	95.3
1987																
September	89.9	97.4	128.4	84.1	104.9	105.6	103.9	88.6	110.0	83.5	103.7	97.8	108.5	110.3	103.3	94.9
October	90.0	97.6	127.4	83.0	104.3	105.0	104.0	89.1	115.0	83.3	104.3	99.4	108.3	110.7	103.4	94.7
November	86.6	96.6	131.7	76.9	104.3	107.2	103.5	90.9	110.0	83.3	105.2	99.4	111.0	112.0	100.8	95.0
December	84.3	96.9	136.9	78.6	105.1	106.9	103.6	91.5	110.4	83.5	104.7	99.0	112.3	112.6	99.1	94.9
1988																
January	84.6	98.7	137.4	78.7	105.1	105.9	104.2	91.2	110.8	83.7	103.6	99.4	111.2	111.8	101.6	95.4
February	85.4	99.7	136.1	80.5	104.5	105.7	103.9	91.1	110.3	82.8	103.6	100.4	110.4	111.4	104.7	96.2
Real against 18 other industrial-country and 22 LDC currencies																
1982	109.7	101.7	94.0	105.2	96.9	99.4	98.1	98.5	101.1	91.5	99.5	98.9	102.6	97.7	102.9	95.4
1983	114.9	104.6	100.4	102.0	94.4	100.6	100.8	93.1	102.1	88.2	99.5	89.2	105.1	100.3	101.9	91.0
1984	120.8	102.7	102.4	106.7	96.4	96.8	101.0	89.7	102.6	85.0	95.9	91.3	99.8	99.0	100.5	95.8
1985	123.3	99.0	104.2	89.6	99.9	95.7	99.7	92.2	102.8	84.4	94.7	93.1	97.6	101.1	99.7	96.7
1986	106.6	94.4	127.1	80.4	104.4	104.4	104.0	88.1	107.3	85.1	101.3	96.5	107.4	107.9	97.8	96.7
1987	96.5	96.5	131.9	82.1	106.4	108.5	106.2	89.1	111.8	85.5	105.4	99.3	112.3	112.5	101.4	96.6
1987																
September	95.7	97.4	132.2	85.4	105.9	107.7	106.2	90.0	111.3	84.5	104.4	101.2	111.2	111.1	104.2	96.0
October	95.6	97.6	131.0	84.0	105.3	107.1	106.3	90.6	116.4	84.3	105.0	102.8	111.0	111.5	104.3	95.9
November	92.4	96.3	134.9	78.4	105.5	109.7	106.2	92.7	111.6	84.6	106.3	103.1	114.0	112.9	101.8	96.3
December	90.6	96.4	140.0	80.1	106.4	109.5	106.4	93.4	112.1	85.0	105.9	102.9	115.4	113.5	100.1	96.2
1988																
January	90.7	98.1	140.6	80.2	106.2	108.3	106.9	93.0	112.4	85.0	104.7	103.1	114.1	112.7	102.7	96.7
February	91.6	99.3	142.2	81.9	105.9	108.2	107.0	93.3	111.9	84.1	105.0	104.4	113.4	112.6	105.9	97.7

Real effective exchange rates — developing countries

Index numbers, 1980-82 average=100.

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Taiwan	Israel	Turkey
1982	77.0	113.0	97.3	105.9	82.7	104.6	110.2	101.4	111.7	101.9	105.6	106.7	100.8	96.6	108.7	96.1
1983	71.6	86.0	89.3	104.9	79.0	98.4	117.3	95.0	96.2	97.6	113.9	96.1	101.8	94.6	120.8	94.2
1984	80.2	85.7	90.1	99.6	91.9	105.8	85.9	99.5	96.0	96.5	119.6	107.9	102.5	97.1	119.5	89.6
1985	71.0	84.8	79.5	85.3	90.4	96.0	92.7	103.3	93.7	88.7	115.7	114.1	95.2	94.3	106.5	88.8
1986	60.9	74.3	68.5	67.5	65.0	93.5	85.5	93.4	70.8	75.4	94.1	89.9	79.9	88.4	100.8	70.7
1987	53.4	73.5	65.1	63.1	66.7	121.8	60.0	89.2	54.2	74.7	88.3	86.4	73.6	92.5	97.2	62.6
1987																
March	53.2	71.1	66.5	64.7	61.9	112.5	56.8	89.1	54.5	73.4	89.7	84.2	73.9	88.9	94.5	64.0
April	53.0	75.2	65.8	63.4	62.0	115.1	57.5	88.6	53.1	73.1	90.3	83.5	72.7	89.4	95.0	63.5
May	53.0	75.5	65.9	62.5	62.9	117.8	59.7	89.7	53.3	73.7	89.7	83.7	73.0	91.9	94.9	63.1
June	53.5	75.3	65.5	62.7	65.0	121.3	61.7	90.6	54.2	75.7	89.6	86.1	73.5	94.6	96.8	62.9
July	53.4	72.9	65.7	63.9	68.3	131.0	63.6	90.0	55.5	77.3	89.5	88.5	74.0	95.4	98.6	63.0
August	54.6	71.1	66.1	63.5	69.6	140.2	64.3	89.6	55.3	77.0	89.3	88.3	74.3	96.8	99.7	63.2
September	53.5	70.9	65.3	62.7	71.5	146.9	64.5	90.3	54.3	75.9	88.5	87.2	73.7	95.9	99.8	61.8
October	53.9	73.2	64.3	62.1	73.6	145.5	64.0	90.0	54.6	75.9	87.2	89.3	73.1	95.1	100.5	60.8
November	49.3	73.9	61.7	60.8	73.6	127.2	63.3	89.2	53.1	73.6	85.0	87.5	72.2	92.2	99.3	58.0
December	49.1	74.7	61.4	60.3	67.3	97.3	63.2	86.6	51.4	73.1	83.4	86.2	72.5	93.2	99.2	62.5
1988																
January	49.5	77.2	58.2	61.8	72.7	93.0	66.3	84.9	51.3	74.1	82.0	86.5	71.1	93.6	100.7	63.1
February	51.2	76.0	59.4	61.2	73.8	105.0	72.4	86.5	52.7	77.5	82.1	86.5	71.8	94.5	103.8	57.0

International banking market size

at end of period, billions of dollars

	1982	1983	1984	1985	1986			1987	
					Jun	Sep	Dec	Mar	Jun
Gross claims									
Eurocurrencies, on residents and nonresidents	**2 146**	**2 253**	**2 359**	**2 833**	**3 040**	**3 347**	**3 560**	**3 811**	**3 942**
On nonbanks	634	665	694	822	875	914	938	995	1 175
On banks	1 512	1 588	1 665	2 011	2 165	2 433	2 622	2 817	2 767
In dollars	1 694	1 797	1 894	2 101	2 166	2 381	2 534	2 602	2 753
In other currencies	452	456	465	732	874	966	1 025	1 209	1 189
Domestic currencies, on nonresidents	**398**	**402**	**402**	**506**	**578**	**633**	**672**	**721**	**757**
On nonbanks	132	140	142	187	201	211	209	229	236
On banks	266	262	260	319	377	422	463	492	521
In dollars	211	221	215	215	210	219	227	206	215
In other currencies	187	181	187	291	368	414	445	515	542
Total	**2 544**	**2 655**	**2 761**	**3 339**	**3 618**	**3 980**	**4 232**	**4 532**	**4 699**
On nonbanks	766	805	836	1 009	1 076	1 125	1 147	1 224	1 411
On banks	1 778	1 850	1 925	2 330	2 542	2 855	3 085	3 309	3 288
In dollars	1 905	2 018	2 109	2 316	2 376	2 600	2 761	2 808	2 968
In other currencies	639	637	652	1 023	1 242	1 380	1 470	1 724	1 731
Gross liabilities									
Eurocurrencies, to residents and nonresidents	**2 168**	**2 278**	**2 386**	**2 846**	**3 059**	**3 384**	**3 579**	**3 851**	**3 999**
To nonbanks	432	479	497	585	632	660	685	740	768
To official monetary institutions	91	88	96	112	109	110	109	125	139
To other banks	1 645	1 711	1 793	2 149	2 318	2 614	2 786	2 986	3 085
In dollars	1 741	1 846	1 950	2 147	2 204	2 425	2 553	2 648	2 785
In other currencies	427	432	436	699	855	959	1 026	1 203	1 214
Domestic currencies, to nonresidents	**250**	**260**	**280**	**377**	**418**	**454**	**494**	**556**	**580**
To nonbanks	70	73	80	114	121	121	116	134	144
To banks	180	187	200	263	297	343	377	422	436
In dollars	116	135	146	169	171	191	192	192	197
In other currencies	134	125	134	208	247	273	302	364	383
Total	**2 418**	**2 538**	**2 666**	**3 223**	**3 477**	**3 848**	**4 073**	**4 407**	**4 579**
To nonbanks	502	552	577	699	753	781	801	874	912
To banks and official institutions	1 916	1 986	2 089	2 524	2 724	3 067	3 272	3 533	3 660
In dollars	1 857	1 981	2 096	2 316	2 375	2 616	2 745	2 840	2 982
In other currencies	561	557	570	907	1 102	1 232	1 328	1 567	1 597
Net market size	**1 285**	**1 382**	**1 430**	**1 676**	**1 800**	**1 912**	**1 979**	**2 083**	**2 170**

International bond issues and bank credits

millions of dollars

	1985	1986	1987	1987		1988	Jan	
				Nov	Dec	Jan	1988	1987
By country of borrower								
Industrial countries	**226 711**	**273 653**	**248 718**	**28 295**	**19 581**	**15 667**	**15 667**	**21 575**
Australia	14 407	19 251	11 349	162	823	427	427	1 122
Austria	2 435	3 821	4 695	980	186	1 494	1 494	657
Belgium	3 269	5 042	4 443	682	32	224	224	697
Canada	17 184	23 752	10 161	921	866	1 078	1 078	957
Denmark	3 589	9 813	4 774	413	167	255	255	1 647
Finland	1 846	3 578	3 517	360	303	90	90	504
France	18 773	20 027	16 022	2 791	2 697	3 027	3 027	1 110
Germany	3 452	12 589	10 922	298	509	286	286	2 162
Greece	1 587	1 361	1 462	—	395	—	—	—
Ireland	1 881	3 281	2 195	247	110	408	408	—
Italy	11 033	12 723	13 421	2 902	2 060	445	445	686
Japan	21 269	35 283	45 591	1 767	588	2 470	2 470	2 206
Netherlands	2 299	3 215	5 069	221	213	88	88	672
New Zealand	2 707	7 818	5 942	109	748	—	—	789
Norway	3 905	6 750	5 917	141	313	1 189	1 189	782
Portugal	2 382	2 503	2 159	61	150	161	161	215
South Africa	825	—	—	—	—	—	—	—
Spain	3 913	7 083	1 794	59	372	44	44	55
Sweden	9 890	8 000	5 766	467	359	740	740	595
United Kingdom	25 424	24 109	33 225	2 389	3 853	960	960	3 776
United States	69 193	55 703	45 412	4 200	4 690	2 228	2 228	2 084
*Other**	5 447	7 950	14 880	9 125	147	53	53	859
Developing countries	**32 139**	**23 994**	**27 658**	**1 387**	**2 168**	**1 488**	**1 488**	**565**
Latin American countries	**8 115**	**3 468**	**10 389**	**54**	**143**	**1 029**	**1 029**	—
Argentina	3 700	17	2 110	—	—	—	—	—
Brazil	—	350	—	—	—	—	—	—
Chile	1 085	—	—	—	—	—	—	—
Colombia	1 052	240	137	—	87	1 000	1 000	—
Mexico	109	313	7 700	—	—	—	—	—
Venezuela	48	—	30	—	—	—	—	—
*Other***	2 121	2 548	412	54	57	29	29	—
Asian countries	**18 410**	**14 474**	**13 147**	**1 156**	**1 311**	**159**	**159**	**465**
India	818	1 795	2 156	—	334	—	—	25
Indonesia	451	1 343	1 745	550	300	—	—	16
Korea	5 898	3 251	2 522	26	125	159	159	25
Malaysia	2 219	1 204	554	126	—	—	—	20
Philippines	925	—	—	—	—	—	—	—
Thailand	1 497	1 676	463	55	—	—	—	—
Other	6 602	5 204	5 706	400	551	—	—	380
Middle Eastern and African countries	**5 613**	**6 051**	**4 122**	**177**	**714**	**299**	**299**	**100**
Algeria	1 450	1 344	344	—	—	180	180	—
Nigeria	—	—	—	—	—	—	—	—
Turkey	1 203	2 754	2 831	107	619	119	119	—
Other	2 960	1 952	947	70	95	—	—	100
Eastern European countries	**5 236**	**3 891**	**3 564**	**102**	**132**	**98**	**98**	**24**
Hungary	1 577	1 315	1 951	—	—	—	—	—
Soviet Union	1 489	1 821	864	80	50	73	73	24
*Other****	2 169	755	749	22	82	25	25	—
International organizations****	**20 635**	**19 896**	**20 013**	**2 760**	**773**	**1 010**	**1 010**	**2 261**
By type of instrument and currency								
International bond issues	**167 756**	**228 106**	**177 291**	**12 907**	**7 512**	**12 248**	**12 248**	**17 998**
Eurobonds	136 731	188 747	140 481	8 712	4 500	8 881	8 881	14 707
U.S. dollar	97 782	119 096	56 727	750	875	3 830	3 830	5 365
German mark	9 491	17 127	15 518	1 193	1 750	1 636	1 636	2 955
British pound	5 766	10 585	14 997	1 664	464	887	887	1 069
Japanese yen	6 539	18 516	23 116	3 880	567	1 154	1 154	1 603
European composite units	7 038	7 057	7 423	805	137	553	553	1 909
Other	10 114	16 366	22 699	421	707	820	820	1 806
Foreign bonds	31 025	39 359	36 811	4 195	3 012	3 367	3 367	3 291
U.S. dollar	4 655	6 782	5 911	950	1 050	450	450	450
German mark	1 741	—	—	—	—	—	—	—
British pound	958	394	—	—	—	—	—	—
Swiss franc	14 954	23 213	23 976	2 265	1 588	2 789	2 789	2 338
Japanese yen	6 379	5 223	3 068	591	57	—	—	246
Other	2 339	3 747	3 856	388	317	128	128	257
International bank credits	**116 764**	**93 219**	**122 663**	**19 638**	**15 141**	**6 015**	**6 015**	**6 427**
Eurocurrency credits	110 317	84 158	111 715	18 756	14 849	5 985	5 985	5 842
Foreign credits	6 647	9 061	10 947	882	292	29	29	585
Total	**284 720**	**321 435**	**299 953**	**32 545**	**22 654**	**18 262**	**18 262**	**24 425**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

	1984	1985	1986	1987					1988	
	Dec	Dec	Dec	Aug	Sep	Oct	Nov	Dec	Jan	Feb
Eurodollar										
overnight	8.63	12.25	22.00	6.81	8.25	6.75	6.62	6.75	6.69	6.69
one month	8.38	8.00	6.50	7.12	7.75	7.06	8.25	7.06	6.69	6.69
three months	8.63	7.88	6.25	7.19	8.37	7.62	7.94	7.37	6.81	6.69
six months	9.13	7.88	6.12	7.44	8.50	7.69	7.94	7.50	6.87	6.75
twelve months	9.81	7.94	6.12	7.94	9.00	8.00	8.19	7.81	7.25	7.12
Euro-Canadian dollar										
one month	9.88	9.00	8.00	9.12	9.19	7.69	8.56	8.00	8.50	8.25
three months	10.81	9.00	8.12	9.25	9.69	8.19	9.00	8.12	8.37	8.37
six months	10.06	9.00	8.19	9.62	10.19	8.50	9.12	8.44	8.50	8.37
twelve months	10.44	9.00	8.31	10.00	10.69	8.87	9.44	8.87	8.75	8.75
Euro-French franc										
one month	10.69	12.50	10.12	7.31	7.81	9.00	9.37	8.75	7.50	7.25
three months	10.69	13.00	10.37	8.19	8.31	9.00	9.37	9.00	8.00	7.75
six months	11.00	13.13	9.75	8.81	8.69	9.00	9.37	9.25	8.25	8.19
twelve months	11.38	12.25	8.75	9.31	9.19	9.00	9.37	9.25	8.50	8.50
Euromark										
one month	5.50	4.75	5.12	4.00	4.12	3.69	3.94	3.25	3.19	3.31
three months	5.50	4.75	4.87	4.06	4.56	4.12	3.94	3.37	3.25	3.31
six months	5.56	4.75	4.81	4.31	4.75	4.25	4.06	3.50	3.31	3.37
twelve months	5.56	4.81	4.81	4.44	4.81	4.44	4.12	3.75	3.56	3.50
Euro-Dutch guilder										
one month	5.69	5.75	6.31	5.19	5.25	5.12	4.81	4.50	3.94	3.94
three months	5.75	5.75	6.00	5.31	5.56	5.25	4.94	4.62	4.00	4.00
six months	5.81	5.81	5.87	5.37	5.62	5.37	5.00	4.69	4.12	4.06
twelve months	5.94	5.88	5.81	5.50	5.75	5.44	5.12	4.81	4.37	4.12
Euro-Swiss franc										
one month	4.44	3.88	3.94	3.94	3.69	2.87	4.94	2.50	1.25	1.37
three months	4.56	4.00	3.94	3.75	4.37	3.87	4.06	3.00	1.81	1.69
six months	4.63	4.00	3.87	4.00	4.37	3.87	4.06	3.19	2.37	2.12
twelve months	4.69	4.06	3.87	4.06	4.37	3.87	4.06	3.25	2.87	2.69
Eurosterling										
one month	9.50	11.69	11.12	10.00	10.19	9.37	9.00	8.56	8.44	9.00
three months	9.88	11.81	11.12	10.50	10.37	9.44	8.94	8.81	8.69	9.31
six months	10.00	11.81	11.06	10.75	10.50	9.44	9.00	9.00	8.87	9.50
twelve months	10.19	11.69	11.06	11.00	10.69	9.50	9.12	9.31	9.25	9.75
Euroyen										
one month	6.19	7.13	4.56	4.00	4.37	4.37	4.75	4.00	4.06	4.37
three months	6.19	6.56	4.50	4.06	5.00	4.50	4.44	4.12	4.12	4.19
six months	6.13	6.50	4.37	4.19	5.19	4.50	4.37	4.12	4.12	4.19
twelve months	6.13	6.38	4.31	4.31	5.25	4.62	4.44	4.12	4.19	4.19
European currency unit										
one month	9.25	9.63	8.56	6.75	6.87	7.19	6.94	6.62	5.87	6.12
three months	9.38	9.63	8.44	7.00	7.37	7.44	7.00	6.75	6.19	6.31
six months	9.50	9.63	8.06	7.25	7.56	7.44	6.94	6.87	6.37	6.44
twelve months	9.63	9.63	7.31	7.37	7.68	7.62	7.06	7.00	6.62	6.62

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years
at or near end of month

	1985	1986	1987							1988
	Dec	Dec	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
United States companies										
Eurodollar	9.68	8.67	10.11	9.82	9.99	10.95	10.41	10.21	10.31	10.24
Euromark	6.73	6.62	6.65	7.04	6.82	6.87	7.04	6.74	6.69	6.54
Swiss franc	5.49	5.70	5.50	5.57	5.43	5.50	5.83	5.56	5.71	5.57
European governments										
Eurodollar	10.52	9.91	11.14	11.22	11.41	11.81	11.63	11.63	11.64	11.48
Euromark	7.03	6.77	6.36	6.55	6.65	6.76	6.61	6.61	6.21	6.23
Swiss franc	4.91	4.51	4.33	4.33	4.38	4.39	4.54	4.15	4.11	4.05
European currency unit	10.23	10.20	10.51	10.40	10.43	10.46	11.10	11.06	10.84	10.85

Central bank discount rates

at or near end of month

	1984	1985	1986	1987			1988		Current	
	Dec	Dec	Dec	Oct	Nov	Dec	Jan	Feb	Mar 18 1988	effective since
United States	8.00	7.50	5.50	6.00	6.00	6.00	6.00	6.00	6.00	Sep 24, 87
Canada	10.09	9.49	8.47	8.09	8.56	8.66	8.62	8.57	8.70	Dec 3, 87
Austria	4.50	4.00	4.00	3.50	3.50	3.00	3.00	3.00	3.00	Dec 3, 87
Belgium	11.00	9.75	8.00	7.25	7.25	7.00	7.00	6.75	6.50	Mar 3, 88
Denmark	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Oct 27, 83
Finland	9.50	9.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	May 19, 86
France	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	4.50	4.00	3.50	3.00	3.00	2.50	2.50	2.50	2.50	Dec 3, 87
Ireland	14.00	10.25	13.25	9.75	9.75	9.25	9.25	9.25	9.25	Dec, 87
Italy	16.50	15.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	Aug 28, 87
Netherlands	5.00	5.00	4.50	4.50	4.00	3.75	3.75	3.25	3.25	Feb 5, 88
Portugal	25.00	19.00	16.00	14.50	14.50	14.50	14.50	14.50	14.50	Oct, 87
Spain	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	Jul 26, 77
Sweden	9.50	10.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	Sep 19, 86
Switzerland	4.00	4.00	4.00	3.50	3.00	2.50	2.50	2.50	2.50	Dec 4, 87
United Kingdom	9.38	11.31	10.81	9.37	8.87	8.37	8.37	8.87	8.37	Mar 17, 88
Japan	5.00	5.00	3.00	2.50	2.50	2.50	2.50	2.50	2.50	Feb 23, 87
New Zealand	13.50	19.80	24.60	21.90	18.45	18.55	18.05	19.40	17.10	Mar 18, 88
South Africa	21.75	13.50	10.00	10.00	10.00	10.00	10.00	10.00	10.50	Mar 10, 88
Argentina*	18.19	5.00	11.19	17.00	17.00	17.59	15.71	16.71	16.71	Feb, 88
Korea	5.00	5.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Jul 10, 86
Philippines	12.11	11.50	9.64	9.13	9.19	9.25	n.a.	n.a.	n.a.	
Singapore	6.75	5.00	5.00	5.00	5.00	5.00	5.00	3.50	3.50	Feb, 88
Thailand	10.97	11.00	8.00	n.a.	n.a.	n.a.	n.a.	n.a.	8.00	Sep 1, 86
Venezuela	11.00	12.94	12.79	12.93	12.98	n.a.	n.a.	n.a.	12.98	Nov, 87

*Percent per month.

Day-to-day money rates

monthly averages

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	8.38	8.27	6.71	6.58	6.73	7.21	7.29	6.69	6.47	6.87	6.60
Canada	10.50	9.23	8.28	8.53	8.72	8.80	8.41	8.16	8.40	8.44	8.41
Austria	7.63	7.25	7.62	4.10	4.10	4.12	4.60	4.20	4.10	4.50	3.50
Belgium	9.12	6.60	5.09	5.62	4.82	5.24	4.61	5.44	5.09	6.60	4.46
Finland	15.07	11.96	11.97	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
France	10.95	9.02	7.80	7.46	7.41	7.36	7.69	n.a.	8.23	n.a.	n.a.
Germany	5.62	4.64	5.00	3.73	3.78	3.71	3.74	3.55	3.19	3.13	3.28
Ireland	14.50	9.62	13.00	9.00	8.25	8.75	6.50	8.50	7.50	8.00	8.50
Italy	17.25	14.75	11.42	10.95	11.09	11.70	10.90	10.25	10.25	n.a.	n.a.
Netherlands	5.60	5.75	6.19	5.19	4.84	4.75	5.19	4.44	4.25	4.12	3.87
Norway	12.50	12.50	14.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	12.18	9.92	11.76	18.09	17.68	17.45	16.22	14.60	14.02	13.20	12.13
Sweden	11.88	11.83	8.89	8.61	8.46	8.57	8.42	8.97	8.43	8.75	8.50
Switzerland	1.50	2.00	1.12	2.00	1.50	1.37	1.25	1.50	0.50	0.50	1.00
United Kingdom	6.31	9.72	9.19	8.78	9.12	9.72	9.68	9.13	7.60	8.26	8.28
Australia	10.98	18.37	15.40	12.08	11.90	11.58	12.50	11.90	10.75	10.70	10.50
Japan	6.41	8.02	4.18	3.17	3.19	3.39	3.37	3.39	3.81	3.54	3.39
South Africa	21.13	12.50	8.50	8.56	8.56	8.45	8.45	8.45	8.82	9.56	10.41
Argentina*	17.75	4.50	7.00	9.00	11.17	12.50	9.00	9.80	14.90	16.40	14.90
Brazil	272.02	352.23	83.05	n.a.	153.78	150.10	150.10	329.33	n.a.	n.a.	n.a.
Hong Kong	6.80	6.10	3.90	5.33	5.54	3.67	4.92	1.90	0.56	0.58	1.83
Korea	10.00	8.80	9.00	8.90	10.00	9.50	10.00	8.70	8.60	n.a.	n.a.
Philippines	15.22	15.03	9.92	9.17	8.46	16.50	12.94	n.a.	n.a.	n.a.	n.a.
Singapore	6.01	4.53	3.51	3.33	2.91	2.52	3.55	3.40	2.57	2.73	2.93
Taiwan	8.07	4.50	3.00	5.50	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

*Percent per month.

Treasury bill rates

bond equivalent yields, at or near end of month

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	7.99	7.25	5.73	6.11	6.41	6.82	5.41	5.50	5.90	5.81	5.75
Canada	9.84	9.24	8.22	8.97	8.99	9.32	7.84	8.31	8.41	8.37	8.33
Belgium	10.90	9.89	7.50	6.74	6.74	6.74	7.25	6.95	6.84	6.44	6.24
Ireland	15.10	11.15	13.60	9.56	9.93	8.93	8.80	9.10	8.69	8.34	8.76
Italy	14.69	13.10	10.00	10.53	10.92	10.63	10.54	9.95	n.a.	n.a.	n.a.
Netherlands	5.88	5.69	6.37	5.25	5.62	5.62	5.50	5.25	4.95	4.75	4.25
Spain	12.27	9.52	8.37	8.61	7.10	6.73	8.23	6.78	6.67	5.56	5.83
Sweden	11.83	12.49	9.20	9.11	9.25	9.30	9.49	9.20	9.05	9.20	9.32
United Kingdom	9.33	11.49	10.79	9.14	10.12	10.02	9.07	8.67	8.38	8.38	8.81
Australia	12.27	19.40	14.91	12.04	11.91	11.09	10.47	10.34	10.06	9.92	n.a.
Japan	4.91	4.91	2.89	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38
New Zealand	13.50	17.62	19.69	n.t.	19.38	n.t.	n.t.	n.t.	18.25	16.32	15.69
South Africa	21.94	12.99	8.84	8.74	8.70	8.72	8.68	8.64	8.85	9.49	9.55
Brazil	273.03	379.77	149.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	48.67	72.98	104.03	96.86	95.95	95.47	96.43	110.67	133.04	152.31	n.a.
Philippines	47.14	16.45	9.55	10.91	11.67	12.60	12.97	13.18	n.a.	n.a.	n.a.
Singapore	2.91	2.94	2.10	2.97	3.01	3.26	3.57	3.69	3.23	2.92	2.97

Representative money market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	8.34	8.01	8.04	6.98	7.10	7.94	7.58	7.80	7.21	6.90	6.77
Canada	10.00	9.40	8.35	9.20	9.15	9.25	8.50	8.70	8.90	8.65	8.55
Belgium	10.85	9.89	7.60	6.84	6.79	6.79	7.35	7.15	6.95	6.54	6.34
France	10.69	9.12	8.37	7.87	7.81	7.87	8.25	8.62	8.56	n.a.	n.a.
Germany	5.75	4.80	4.85	3.85	3.85	4.55	4.10	3.80	3.65	3.23	3.28
Ireland	15.13	12.00	14.06	9.87	9.94	9.94	9.25	9.19	8.81	8.62	8.94
Italy	16.88	15.13	11.37	11.12	12.37	12.37	12.00	11.62	11.50	n.a.	n.a.
Netherlands	5.75	5.75	6.19	5.37	5.25	5.38	5.25	4.94	4.56	4.32	4.06
Portugal	24.57	20.71	16.07	15.07	15.09	14.79	14.66	14.19	n.a.	n.a.	n.a.
Spain	12.21	10.51	11.79	17.56	16.83	16.86	15.84	14.44	13.59	12.30	12.01
Switzerland	5.00	4.75	4.50	3.94	3.75	4.25	4.06	4.06	3.56	1.69	1.81
United Kingdom	9.88	12.75	11.25	9.44	10.31	10.19	9.19	8.87	8.94	8.62	9.25
Australia	12.90	19.75	15.10	12.40	12.50	11.20	12.15	12.00	11.25	10.80	10.78
Japan	6.33	7.03	4.34	3.74	3.71	3.84	3.88	3.90	3.90	3.85	n.a.
New Zealand	15.00	20.00	24.25	18.70	18.30	18.90	20.30	16.90	16.70	17.30	n.a.
South Africa	22.78	13.35	8.55	8.80	8.85	8.90	8.90	8.50	8.90	9.60	10.25
Chile	20.68	22.42	19.56	18.16	25.34	26.82	31.37	34.49	15.25	11.35	10.69
Hong Kong	8.25	6.50	4.62	6.19	6.56	6.37	6.19	4.06	1.50	3.00	3.87
Indonesia	19.00	15.00	19.50	20.75	20.50	18.75	17.37	17.50	17.50	17.00	18.50
Korea	8.00	8.00	8.00	7.50	7.50	7.50	7.50	7.50	7.50	n.a.	n.a.
Malaysia	10.30	8.20	6.00	2.75	2.76	2.66	2.96	3.44	n.a.	n.a.	n.a.
Philippines	33.21	14.61	8.31	9.98	10.31	11.15	11.81	n.a.	n.a.	n.a.	n.a.
Singapore	7.00	5.88	3.94	4.13	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Taiwan	7.85	4.10	3.87	4.72	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Commercial bank deposit rates

at or near end of month

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	8.35	7.75	6.30	6.77	6.95	8.05	7.40	5.41	7.10	5.88	6.61
Canada	10.05	9.40	8.15	9.25	9.20	9.60	8.55	8.75	8.40	8.50	8.50
Austria	7.50	6.50	5.50	4.25	4.30	4.60	4.75	4.45	4.25	4.40	4.05
Belgium	10.63	9.63	7.44	6.19	6.52	6.56	6.00	6.66	6.69	6.31	6.25
Denmark	6.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	n.a.	n.a.
Finland	5.25	4.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75
France	7.04	6.12	4.50	4.50	4.50	4.50	4.50	4.50	n.a.	n.a.	n.a.
Germany	5.25	4.40	4.80	3.75	3.75	3.90	3.90	3.70	3.50	3.20	3.20
Ireland	14.63	11.87	13.75	9.62	9.87	9.00	8.62	9.12	8.62	8.50	8.75
Italy	11.64	13.21	10.69	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.
Netherlands	5.69	5.81	6.06	5.25	5.25	5.50	5.12	4.81	4.50	4.21	3.94
Norway	12.75	12.00	n.a.	n.a.	n.a.	n.a	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	28.00	20.00	15.00	14.50	14.50	14.50	14.00	14.00	14.00	n.a.	n.a.
Spain	11.64	9.64	8.67	9.04	9.21	9.02	9.11	9.32	9.48	9.39	n.a.
Sweden	11.45	12.18	9.93	9.25	9.70	9.70	9.70	9.70	9.45	9.55	9.55
Switzerland	4.50	4.50	4.25	3.69	3.50	4.00	3.81	3.81	3.37	1.44	1.56
United Kingdom	9.88	11.75	11.19	9.31	10.12	10.00	9.12	8.81	8.81	8.75	9.25
Australia	12.75	18.80	15.56	13.41	12.67	12.14	11.25	12.28	11.70	11.20	n.a.
Japan	6.38	7.04	4.55	4.09	4.10	4.45	4.63	4.46	4.42	4.33	4.41
New Zealand	15.25	19.98	23.50	18.35	18.40	18.75	18.95	17.90	17.50	n.a.	n.a.
South Africa	22.88	13.20	8.65	9.00	9.00	9.35	9.35	9.35	9.75	10.50	11.30
*Argentina**	31.23	5.40	8.41	10.24	12.20	18.20	9.10	8.92	14.00	15.12	14.30
Brazil	27.00	18.00	220.00	n.a.	11.00	11.00	14.00	15.00	17.50	n.a.	n.a.
Chile	20.68	23.60	20.98	17.74	25.05	26.03	30.30	31.53	14.84	11.75	9.25
Hong Kong	8.25	6.50	4.62	6.19	6.56	6.37	6.19	4.06	1.50	3.00	3.87
Korea	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	n.a.	n.a.
Malaysia	9.58	7.00	6.33	6.16	6.13	6.16	6.11	6.04	n.a.	n.a.	n.a.
Mexico	47.45	72.90	94.30	94.30	94.20	94.20	94.20	94.20	120.35	119.47	n.a.
Philippines	31.01	12.34	7.75	7.35	7.35	8.79	8.56	9.50	n.a.	n.a.	n.a.
Singapore	6.13	5.26	3.63	4.25	3.98	3.61	3.50	3.51	3.28	3.11	3.29
Taiwan	6.50	5.25	4.00	4.00	4.00	4.00	4.00	4.00	n.a.	n.a.	n.a.
Thailand	13.00	10.50	6.75	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Venezuela	12.50	8.00	8.00	8.97	8.95	8.94	8.92	8.95	8.95	n.a.	n.a.

*Percent per month.

Domestic government bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	11.61	9.49	7.79	8.88	9.18	9.80	9.04	9.10	8.95	8.56	8.43
Canada	11.66	10.04	9.23	10.23	10.44	11.16	10.21	10.50	10.34	9.74	9.79
Austria	8.03	7.61	7.33	6.68	6.83	7.00	7.26	7.13	6.89	6.83	6.80
Belgium	11.56	9.60	7.70	7.64	7.93	8.25	8.32	7.98	8.04	7.95	7.67
Denmark	14.60	9.67	11.04	11.57	13.02	12.33	12.56	11.84	12.05	11.18	n.a.
Finland	10.73	10.58	7.80	7.86	7.87	7.83	7.77	7.64	7.67	7.40	7.40
France	12.70	11.33	9.89	10.39	10.60	11.06	10.95	10.46	10.57	n.a.	n.a.
Germany	7.17	6.57	6.25	6.39	6.59	6.86	6.62	6.46	6.51	6.50	6.32
Ireland	14.90	11.84	12.97	11.81	11.92	11.30	11.05	10.23	10.45	10.61	10.41
Italy	14.52	13.66	10.05	10.90	11.30	11.30	11.41	11.25	10.50	n.a.	n.a.
Netherlands	7.72	6.96	6.40	6.43	6.66	6.81	7.05	6.37	6.32	6.17	5.99
Norway	12.00	13.00	13.24	13.00	12.97	12.78	12.69	n.a.	n.a.	n.a.	n.a.
Portugal	22.23	16.64	14.94	15.10	15.20	15.50	15.30	15.60	n.a.	n.a.	n.a.
Spain	13.93	12.52	10.36	13.56	13.75	14.26	14.24	13.34	13.14	12.48	11.91
Sweden	12.04	12.11	10.66	11.79	11.92	12.02	11.42	11.51	11.39	11.30	10.96
Switzerland	4.60	4.42	4.05	3.98	4.06	4.33	4.12	3.86	3.95	4.07	4.39
United Kingdom	10.25	10.35	10.17	9.69	9.93	9.85	9.22	9.23	9.47	9.32	9.15
Australia	13.50	14.85	13.40	12.95	12.95	12.50	13.65	13.30	12.85	12.39	12.26
Japan	6.47	5.92	4.61	4.44	4.43	5.72	4.58	5.00	4.88	4.23	4.36
New Zealand	16.90	17.00	16.00	15.80	15.65	15.55	15.70	14.90	14.30	14.25	n.a.
South Africa	16.55	18.09	15.06	15.18	14.98	15.12	15.44	15.30	15.70	16.80	16.52
Philippines	18.54	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Venezuela	14.00	12.00	12.00	12.00	12.00	12.50	12.50	12.50	12.50	n.a.	n.a.

Commercial bank lending rates to prime borrowers

at or near end of month

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	10.75	9.50	7.50	8.25	8.25	8.75	9.00	8.75	8.75	8.50	8.50
Canada	11.25	10.00	9.75	9.50	10.00	10.00	9.75	9.75	9.75	9.75	9.75
Austria	9.25	9.00	9.00	8.50	8.50	8.50	8.50	8.50	8.25	8.25	8.25
Belgium	14.00	11.50	9.75	8.75	8.75	8.75	8.75	8.75	8.75	8.75	8.50
Denmark	10.50	8.50	8.00	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
Finland	10.68	10.37	8.81	8.93	8.94	8.95	8.97	9.02	8.99	9.03	n.a.
France	12.00	10.60	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
Germany	7.75	7.25	6.75	6.25	6.25	6.25	6.25	6.25	6.25	6.00	6.00
Ireland	15.75	12.50	15.75	12.75	12.75	12.00	12.00	12.00	11.50	11.50	11.50
Italy	18.00	15.88	13.00	12.50	13.00	13.00	13.00	13.00	13.00	12.50	12.62
Netherlands	6.25	6.25	7.12	5.62	5.62	5.62	5.50	5.25	4.87	4.62	4.25
Norway	13.00	12.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	29.00	22.50	17.50	19.50	19.50	19.50	18.50	18.50	18.50	n.a.	n.a.
Spain	15.84	14.75	14.22	16.62	16.61	16.69	16.48	16.38	16.34	16.10	15.76
Sweden	14.50	15.05	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
Switzerland	6.00	6.00	5.75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
United Kingdom	9.50	11.50	11.00	9.00	10.00	10.00	9.50	9.00	8.50	8.50	9.00
Australia	14.00	21.00	18.50	15.75	15.25	14.45	14.00	13.75	13.50	13.00	n.a.
Japan	5.50	5.50	3.75	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37
New Zealand	14.00	21.00	18.50	21.00	19.00	20.00	19.50	18.50	17.25	n.a.	n.a.
South Africa	24.00	16.50	12.00	12.50	12.50	12.50	12.50	12.50	13.00	13.00	13.00
Argentina*	32.05	7.30	11.30	13.20	15.90	20.00	9.80	9.98	14.80	15.80	15.00
Brazil**	31.00	19.00	250.00	n.a.	15.00	15.00	18.00	18.00	19.50	n.a.	n.a.
Chile	60.82	33.34	29.13	27.11	31.66	33.12	37.33	40.20	30.99	21.22	20.51
Hong Kong	11.00	7.00	6.50	7.50	7.50	7.50	6.50	6.00	5.50	5.25	6.00
Indonesia	23.50	18.75	19.75	26.00	23.00	22.00	21.00	20.50	20.50	20.50	20.50
Korea	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	n.a.	n.a.
Malaysia	12.00	10.50	10.00	7.68	7.68	7.47	7.47	7.47	n.a.	n.a.	n.a.
Mexico	47.54	65.66	95.33	92.91	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Philippines	44.00	15.00	10.50	9.50	9.50	9.87	10.65	11.50	n.a.	n.a.	n.a.
Singapore	9.40	7.20	6.10	6.10	6.10	6.10	6.10	6.10	6.10	5.98	5.93
Taiwan	10.00	9.50	9.00	9.00	9.00	9.00	9.00	9.00	9.00	n.a.	n.a.
Venezuela	16.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	n.a.	n.a.	n.a.

*Percent per month.

**Spread above monetary correction until Feb 86; nominal rate of interest until Jan 87; spread above LBC rate thereafter.

Domestic corporate bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987						1988	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
United States	12.25	10.15	8.88	9.90	10.15	10.75	10.25	10.30	9.90	9.60	9.45
Canada	12.42	10.74	10.18	11.05	11.74	11.81	11.22	11.32	10.95	10.37	9.96
France	12.94	11.76	10.18	10.37	10.77	11.07	11.28	10.96	n.a.	n.a.	n.a.
Germany	7.20	6.90	6.50	6.60	6.70	6.95	6.72	6.57	6.63	n.a.	n.a.
Netherlands	7.51	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Norway	12.75	14.00	14.94	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	18.32	14.92	13.40	16.94	17.52	17.39	17.93	17.08	16.15	15.79	14.68
Sweden	12.33	13.25	11.99	12.68	12.89	n.a.	12.78	12.36	12.31	12.20	11.83
Switzerland	5.09	4.93	4.72	4.53	4.55	4.72	4.87	4.65	4.60	4.50	4.39
United Kingdom	11.64	11.47	11.71	10.55	11.41	11.43	11.09	10.59	11.03	10.76	10.65
Japan	7.10	6.79	5.93	5.10	6.00	6.89	6.27	5.90	5.45	5.28	5.21
Korea	15.00	13.60	12.80	12.70	12.60	12.80	12.80	12.80	12.80	12.80	n.a.
Venezuela	18.00	17.00	17.00	17.00	18.00	18.00	18.00	18.00	18.00	n.a.	n.a.

Key to data in tables

I. International markets

Data on the *international banking market size* are based on resident and nonresident Eurocurrency (i.e., foreign currency) assets and liabilities and on nonresident domestic currency assets and liabilities of banks in nearly all European countres, the Bahamas, Bahrain, Canada, Cayman Islands, Hong Kong, Japan, Netherlands Antilles, Panama, Singapore, and the United States. All assets and liabilities of international banking facilities (IBFs) of banks in the United States are treated as Eurocurrencies.

An *international bond issue* may be either a Eurobond issue or a foreign bond issue. A *Eurobond issue* is one placed principally in countries other than that of the currency in which the bond is denominated, usually through an international syndicate. A *foreign bond issue* is one issued by a nonresident borrower on the market of a single country and denominated in that country's currency. Data on new international bond issue volume include all publicly announced issues of straight bonds, convertibles, bonds with warrants, floating rate notes, and certificates of deposit with an original maturity of three years or more (one year or more beginning in 1985), whether publicly or privately placed.

An *international bank credit* may be either a Eurocurrency credit or a foreign credit. A *Eurocurrency credit* is one denominated in a currency that is foreign to the country of the bank office extending the credit. A *foreign credit* is one extended to a nonresident borrower and denominated in the domestic currency of the country in which the bank office extending the credit is located. Data on new international bank credit volume include all publicly announced bank credits with an original maturity of one year or more (term loans, revolving lines of credit, and facilities to back up the issuance of other financial instruments such as commercial paper, short-term notes, certificates of deposit and banker's acceptances).

Data on international bond issues and bank credits through 1984 were compiled by Morgan Guaranty Trust Company. Beginning in January 1985 these data are based on figures published in the OECD's *Financial Statistics Monthly*.

II. Domestic markets

Central bank discount rates

Rates shown are the official discount rates with the exception of:

Ireland — Short Term Facility rate.
South Africa — discount rate for 90-day banker's acceptances.
United Kingdom — rate of discount for outright purchases of 15- to 33-day bank bills.

Day-to-day money rates

Argentina—7-day interbank money regulated by the central bank.
Austria — day-to-day interbank rate.
Australia — effective interest rate in the official short-term money market.
Belgium — day-to-day loan rate in the call money market.
Brazil — interbank overnight money.
Canada—chartered banks' day-to-day loans.
Finland — Bank of Finland call money.
France — interbank call money against private paper.
Germany — interbank call money.
Hong Kong — interbank 24-hour call rate.
Ireland — interbank call money.
Italy — interbank 48-hour call money.
Japan—Tokyo interbank call money, unconditional lenders rate.
Korea — overnight interbank call money.
Netherlands — open-market call money.
Norway — day-to-day interbank rate.
Philippines — interbank call loan rate.
Singapore — interbank overnight money.
South Africa — discount houses basic call rate.
Spain — day-to-day interbank rate.
Sweden — interbank call money.
Switzerland — call money.
Taiwan — private interbank overnight loan rate.
United Kingdom — call money.
United States — federal funds rate.

Treasury bill rates

Australia — 13-week Treasury notes at tender.
Belgium — new issue of 3-month Treasury certificates.
Brazil — 3-month Treasury bills.
Canada — 3-month Treasury bills at tender.
Ireland — 3-month central bank exchequer bills at tender.
Italy — 6-month Treasury bills.
Japan — 60- to 62-day noninterest-bearing discount government bills.
Mexico — 3-month Federal Treasury bills.
Netherlands — 3-month Treasury bills.
New Zealand — tap issue rate for 3-month Treasury bills until December 1984. As of January 1985, 3-month Treasury bills at tender.
Philippines — simple average of 91-day Treasury bills at tender until June 1984. Beginning July 1984 rates refer to the weighted average interest rate on 91- to 183-day Treasury bills sold to banks under negotiated basis.
Singapore — 91-day Treasury bills at tender.
South Africa — 3-month Treasury bills at tender.
Spain — 6-month Treasury bills at tender until March 1984. As of April 1984, 3-month Treasury bill repos reported by the Bank of Spain (average of quotations during the month).
Sweden — new issues of 3-month Treasury bills until June 1982. New series as of July 1982, 6-month Treasury discount notes, market rate.
United Kingdom — 91-day Treasury bills at tender.
United States — 3-month Treasury bills.

Representative money-market rates

Australia — buying rate for 90-day bank accepted commercial bills.
Belgium — 4-month Fonds des Rentes certificates.
Canada — 3-month prime finance company paper.
Chile — central bank 60-day fixed rate promissory notes (PDBC) at tender.
France — 3-month interbank money against private paper.
Germany — 3-month interbank deposits.
Hong Kong — 3-month interbank deposits.
Indonesia — 1-month interbank deposits.
Ireland — 3-month interbank deposits.
Italy — 3-month interbank deposits.
Japan — 3-month "gensaki" rate.
Korea — 3-month financial bill.
Malaysia — 3-month interbank deposits.
Netherlands — 3-month interbank deposits.
New Zealand — 90-day commercial bills.
Philippines—weighted average interest rate for 90-day promissory rates.
Portugal — average of 30- to 90-day interbank deposits.
Singapore — 3-month banker's acceptances.
South Africa—90-day banker's acceptances.
Spain — 3-month interbank rate reported by the Bank of Spain (average of quotations during the month).
Switzerland — 3-month interbank deposits.
Taiwan — 90-day banker's acceptances.
Thailand — interbank call money.
United Kingdom — 3-month interbank deposits.
United States — 3-month prime industrial paper.

Commercial bank deposit rates

Argentina — nominal 30-day time deposits. Average of bank rates published by the central bank until August 1984. New series as of September 1984, 30-day acceptances maximum interest rate.
Austria — 3-month time deposits.
Australia — 3-month certificates of deposit.
Belgium — special maximum rate for 3-month time deposits in large amounts.
Brazil — 6-month certificates of deposit with prefixed yields until July 1982. New series as of August 1982, 6-month certificates of deposit reported as a spread above monetary correction which is set every month in relationship to inflation.
Canada — 3-month time deposits.
Chile — 30-day time deposits.
Denmark — time deposits of 3-months' notice.
Finland — time deposits of six-month notice.
France — 3-month time deposits of FF. 1,000,000.
Germany — 3-month time deposits in large amounts.
Hong Kong — negotiable 3-month time deposits of more than HK$500,000.
Ireland — 3-month deposits.
Italy — 3-month time deposits of Lit. 100 million or more.
Japan — 90-day negotiable certificates of deposit issued by the Tokyo office of Morgan Guaranty Trust Company.
Korea — 3-month time deposits.
Malaysia — 3-month time deposits.
Mexico — 3-month certificates of deposit until September 1983. New series as of October 1983, 3-month promissory notes.
Netherlands — 3-month time deposits in large amounts.
New Zealand — 6-month transferable certificates of deposit.
Norway — 3-month special term deposits.
Philippines — weighted average interest rates on 60- to 90-day time deposits of sample commercial banks.
Portugal — 90- to 180-day time deposits until May 1984. New series as of June 1984, 180-day to one-year time deposits.

Key to data in tables — continued

Singapore — 3-month certificates of deposit.
South Africa — 3-month negotiable certificates of deposit.
Spain — deposits over 6 months and less than 1 year for Pts. 1 million or more reported by the Bank of Spain.
Sweden — 3-month certificates of deposit.
Switzerland — 3-month time deposits.
Taiwan — maximum rate for 3-month time deposits.
Thailand — 3-month time deposits.
United Kingdom — 3-month time deposits.
United States — 3-month negotiable certificates of deposit issued by Morgan Guaranty Trust Company.
Venezuela — 6-month negotiable certificates of deposit for domestic depositors only.

Domestic government bond yields

Austria — Austrian National Bank average yield on all outstanding government bonds.
Australia — secondary market yield for 10-year Treasury bonds.
Belgium — Belgium National Bank secondary market average yield on central government bonds of more than 5 years' maturity quoted on Brussels Stock Exchange.
Canada — Bank of Canada average yield on all direct government bonds due or callable in 10 years or more.
Denmark — 12% serial bonds maturing 2001 until April 1983. New series as of May 1983, 10% serial bonds maturing 2004.
Finland — rate of interest at issue on central government bonds intended for public subscription, weighted by sales of bonds in the latter half of each month.
France — INSEE secondary market weighted average yield of public sector bonds with a remaining maturity of 10 years or more.
Germany — Frankfurter Allgemeine Zeitung 10-year public authority bond average.
Ireland — 15-year government bonds.
Italy — average yield on fixed-interest government bonds, not including irredeemable bonds, weighted by the amounts in circulation, for maturities of 9 years or more.
Japan — secondary market average yield on Central government bonds with a maturity of 5 years or more.
Netherlands — Central Bureau of Statistics (CBS) average yield on three latest government bonds.
New Zealand — average yield on government bonds maturing after 5 years.
Norway — 5% government bond of 1996 until December 1982. New series as of January 1983, average yield of long-term government bonds.
Philippines — weighted average interest rate of outright sales on secondary transactions for central bank certificates of indebtedness.
Portugal — yield of 4% Centenary Loan of 1940.
South Africa — 25-year government bonds until August 1983; 20-year Republic of South Africa bonds until April 1984; new series as of May 1984, secondary market yield for the 13% due 2005 Republic of South Africa bond.
Spain — Bank of Spain secondary market weighted average yield of several central government issues with more than 2 years' maturity (average of quotations during the month).
Sweden — 15-year government bonds until October 1983. New series as of November 1983, 5-year government bond yield index, market rate.
Switzerland — Swiss Confederation bond average.
United Kingdom — F.T. (*Financial Times*) Actuaries 25-year government stock.
United States — Morgan Guaranty 20-year U.S. Government Bond Index.
Venezuela — Banco Central average yield on public-sector bond issues.

Commercial bank lending rates to prime borrowers

Argentina — average rate on 30-day loans.
Austria — overdraft rate for prime borrowers, including commission.
Australia — overdraft rate. Maximum indicator rate applying to loans of A$100,000 or more for major trading banks.
Belgium — prime overdraft rate.
Brazil — prefixed rate applied to working capital loans until July 1982; monetary-corrected free rate applied to working capital loans from August 1982 to July 1983. New series as of August 1983, maximum legal rate reported as a spread above monetary correction which is set every month in relationship to inflation. Charges for fees and commissions are often added.
Canada — prime rate.
Chile — average prime rate of six major commercial banks.
Denmark — approximate rate for loans and advances to prime borrowers.
Finland — average rates on total commercial bank lending.
France — base lending rate, excluding a commission of .05% per month on highest debit balance during the month. A spread above base rate is often added.
Germany — approximate effective overdraft rate for prime borrowers.
Hong Kong — prime lending rate set by the Hong Kong Association of Banks.
Indonesia — prime rate for domestic affiliates of foreign companies.
Ireland — AA corporate borrowing rate.
Italy — unsecured overdraft rate for prime borrowers.
Japan — standard rate of interest on short-term loans of especially high credit standing.
Korea — prime rate.
Malaysia — Bank of Commerce Berhad base lending rate.
Mexico — base rate or average cost of money for banks determined monthly by the Banco de Mexico S.A.
Netherlands — overdraft rate for prime borrowers, including commission.
New Zealand — overdraft rate for prime borrowers.
Norway — overdraft rate, including a commission of .25% per quarter on the total line of credit until January 1983. New series as of February 1983, special rate of first class, large borrowers.
Philippines — prescribed administrative ceiling for unsecured loans with maturities of 365 days and below, including charges until December 1982. New series as of January 1983, modal rate to prime borrowers.
Portugal — maximum rate for 90- to 180-day loans.
Singapore — most common overdraft rate, major banks.
South Africa — unsecured overdraft rate for prime borrowers.
Spain — private banks' average interest rate for 1-year loans reported by the Bank of Spain.
Sweden — overdraft rate for prime industrial borrowers, commission not included.
Switzerland — unsecured overdraft rate for prime borrowers, excluding commission of .25% per quarter on average or highest outstanding debit balance in quarter.
Taiwan — maximum rate for 3- to 12-month secured loans. Rate is an indication only and may vary from actual bank lending rate which is subject to volatile interbank rates.
Thailand — prime rate.
United Kingdom — clearing bank base lending rate. A spread above base rate is often added.
United States — prime rate of Morgan Guaranty Trust Company.
Venezuela — representative rate for domestic prime borrowers only.

Domestic corporate bond yields

Canada — McLeod, Young, Weir Co. Ltd., weighted long-term bond yield index for AA corporates.
France — INSEE secondary market weighted average yield of private company bonds with a remaining maturity of 10 years or more.
Germany — Bundesbank secondary market weighted average yield of industrial bonds with a remaining maturity of more than 3 years.
Japan — secondary market yield for NTT bond maturing March 1987.
Korea — average of yields on corporate bonds guaranteed by local banks, with an original maturity of 3- 2- 5-years.
Netherlands — CBS average yield on three 6%-6.5% corporate bonds until December 1981. As of January 1982, CBS secondary market weighted average yield on all commercial bank issues with a quotation between 92% and 103%.
Norway — 5.75% Dalen Portland-Cement bond of 1969-1984 until December 1982. New series as of January 1983 average yield of long-term industrial bonds.
Spain — Bank of Spain seconary market weighted average yield of several corporate issues with more than 3 years' maturity (average of quotations during the month).
Sweden — Central Satistical Bureau average yield on industrial bonds.
Switzerland — average yield on outstanding bonds of four leading Swiss companies. Mixture changed as of January 1982.
United Kingdom — *Financial Times* secondary market average yield of industrial and financial company debentures and loan stocks with an average of 25 years to maturity.
United States — Salomon Brothers index of new issues yields for Aa industrial bonds with five-year call protection.
Venezuela — average of yields on 15-year bond issues of Electricidad de Caracas.

World Financial Markets

Published by
Morgan Guaranty Trust Company of New York,
a subsidiary of J.P. Morgan & Co. Incorporated
Economics Department
23 Wall Street, New York NY 10015

Member Federal Deposit Insurance Corporation Printed in U.S.A.

Apr. 1988 Not Published